Sr. No	Item Code (CTV)	Item Name	Specification	Total Price department with ITG & Tax Inclusive	M/S A.S.ENTERPRISES	M/S ARMOUR OFFICE AUTOMATION	M/S EDGECOM TELECOMMUNICA TION PVT LTD	M/S NUPUR TECHNOLOGIES PVT.LTD.	M/S PC STATION	M/S RESONANCE ENGINEERING PVT LTD	M/S SIMPLE COMUTER
					— Qualified item Make						
			CATEGORY CA- IP CAMERAS								
1	24CA1	2MP Dome IR Varifocal	Res: 2MP (1920 x 1080) ; Lens:2.8-12mm varifocal ; Image Sensor: 1/2.9" Progressive Scan CMOS; IR range: 50m; WDR: D-WDR; Digital Noise reduction:2D; SD Card Storage 256 or Higher Capacity , IP Rating: IP67; Power consumption:＜5W; Housing: Metal or higher	13629.00	CP PLUS/PRAMA/MATRIX / Globus	CP PLUS / GLOBUS	INDINATUS	D-LINK,PRAMA	PRAMA	CP PLUS	D-LINK
2	24CA2	2MP Bullet IR Varifocal	Res: 2MP (1920 x 1080) ; Lens:2.8-12mm varifocal ; Image Sensor: 1/2.9" Progressive Scan CMOS; IR range: 50m; WDR: D-WDR; Digital Noise reduction:3D;SD Card Storage 256 or Higher Capacity , IP Rating: IP67; Power consumption:＜5W; Housing: Metal or higher	13629.00	CP PLUS/PRAMA/MATRIX / Globus	CP PLUS / GLOBUS	INDINATUS	D-LINK,PRAMA	PRAMA	CP PLUS	D-LINK
3	24CA3	2MP Dome IR Fixed	Res: 2MP (1920 x 1080) ; Lens:6 mm fixed lens ; Image Sensor: 1/2.8" Progressive Scan CMOS; IR range: 50m; WDR: D-WDR; Digital Noise reduction:3D; SD Card Storage 256 or Higher Capacity , IP Rating: IP67; Power consumption:＜5W; Housing: Metal or higher	6557.16	CP PLUS/PRAMA/MATRIX/ Globus	CP PLUS / GLOBUS	INDINATUS	D-LINK,PRAMA	PRAMA	CP PLUS	D-LINK
4	24CA4	2MP Bullet IR Fixed	Res: 2MP (1920 x 1080) ; Lens:6 mm fixed lens ; Image Sensor: 1/2.8" Progressive Scan CMOS; IR range: 50m; WDR: D-WDR; Digital Noise reduction:3D; SD Card Storage 256 or Higher Capacity , IP Rating: IP67; Power consumption:＜5W; Housing: Metal or higher	5606.85	CP PLUS/PRAMA/ MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK,PRAMA	PRAMA	CP PLUS	D-LINK
5	24CA5	3MP 4G Camera	1/3" 3MP CMOS Image Sensor (0.84667cm).• H.265/H.264 Video Compression.• Max. 15fps@3MP.• Support RJ45 Port and 4G Sim.• Support Two-way Audio Communication.• Support Micro SD Card 256GB.• IR Range up to 20-30mtr, spotlight 15mtr.• IR Range up to 20-30mtr, spotlight 15mtr.• With Infrared and spotlight, support three night vision modes, adjustable to achieve full color at night.	5823.30	CP PLUS	CP PLUS / GLOBUS	INDINATUS	Not Qualified	Not Qualified	CP PLUS	Not Qualified
6	24CA6	3MP 4G --Pan/Tilt Camera	• 1/2.8" 3MP CMOS Image Sensor (0.9071 centimeters).• 4mm Fixed Lens.• H.265/H.264 Video Compression.• Max. 15fps@3MP.• Support RJ45 Port and 4G Sim.• Support Two-way Audio Communication.• Pan/Tilt Support: Pan: Up to 263°, Tilt: Up to 90°; 6 preset positions support.• Support Micro SD Card 256GB.• IR Range up to 20-30mtr, White light 15-20mtr.• Support human detection. The device can turn on white light when someone breaks into the monitoring area. And the real-time alarm push information is sent on mobile app.• With white light and infrared light, support three night vision mode: B/W • IP66 waterproof, 4000V lightning protection, anti-surge.	7681.80	CPPLUS	CP PLUS / GLOBUS	INDINATUS	Not Qualified	Not Qualified	CP PLUS	Not Qualified
7	24CA7	2MP 4G WiFi Bullet camera	2.0 MP Outdoor camera IP67 designed ,Two way voice intercom ,Any 4G SIM card supported ,Only Mobile App control and customize alarm audio, Star light night monitoring for superb clarity ,128 GB Micro SD card supported for storage Cloud based storage or higher	5947.20	CPPLUS	CP PLUS / GLOBUS	INDINATUS	Not Qualified	Not Qualified	CP PLUS	Not Qualified
8	24CA8	4MP + 4G Battery Camera with Solar Panel	• 1/2.8" 4MP CMOS Image Sensor (0.9071 centimeters)• 4mm Lens • H.265/H.264 Video Compression• 4G Support• Max. 4MP@15fps• IR Distance of 20-30Mtr.• Built-in mic and speaker, support two-way audio• Support Micro SD Card • Comes with Infrared light and spotlight, support black and white and full color mode • IP66 waterproof Rating • Active defense, someone breaks into the alert area, camera pushes alarm information in real time	12489.12	CPPLUS /PRAMA	CP PLUS / GLOBUS	INDINATUS	Not Qualified	Not Qualified	CP PLUS	Not Qualified
9	24CA9	2 MP Full HD Body Worn Camera	Support 1080P HD recording, Support audio recording and snapshot, Support 110 degree wide angle, Support night vision and white light, Support external Camera, Support 16GB~128GB SD card capacity optional or higher	19824.00	CPPLUS/PRAMA	CP PLUS / GLOBUS	INDINATUS	PRAMA	PRAMA	CP PLUS	Not Qualified

List of Bidders along with Make Qualified for tender Rate Contract for Supply, Installation & Commissioning of CCTV Surveillance to various Government departments/institutions/ organizations in the State of Goa . Tender ref. no ITG-IT/1027/CCTV/2023/3046 dated 02.02.2024

#	Code	Item	Specification	Price							
10	24CA10	Bullet Camera , (outdoor for city surveillance)	1/3" Progressive Scan CMOS or better, True Day & night .Illumination & Light Sensitivity :Sensitivity - (3200K, reflectivity 89%, F1.2, 30IRE) Color 0.11 lux Mono 0.02 lux With IR 0.0 lx, Operating Temp: upto 60° C, ONVIF (Profile S/ Profile G/T/Q, Resolution , Frame Rates and Video Streams: 2MP or higher with Main Stream:1920 × 1080 (1 fps–50/60 fps) Sub Stream: D1 (1 fps–25/30 fps) D1 (1 fps–50/60 fps) Third Stream: 1080P (1 fps–16 fps), IP 67 or higher	8084.48	CPPLUS /PRAMA	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
11	24CA11	Network TDN Low-Light WDR 2MP Box Camera	IMAGE SENSOR 1/2.8" 2 Megapixel progressive scan CMOS, NUMBER OF PIXELS (H × V) 2MP - 1920x1080,MINIMUM ILLUMINATION Color: 0.001Lux @f/1.6, B/W: 0.001Lux @f/1.6,BACKLIGHT COMPENSATION BLC / HLC / WDR /SAC(Scene Adaptive Control), WIDE DYNAMIC RANGE (WDR) HCL2GV: 140dB (50/60fps off), HCW2GV: 120dB (50/60fps off), WHITE BALANCE Auto/Natural/Street Lamp/Outdoor/Manual/Customize Region, GAIN CONTROL Auto/ManualNOISE REDUCTION 3D Noise Reduction (ON / OFF selectable), PRIVACY MASKING Up to 4 configurable areas, VIDEO COMPRESSION H.265+, H.265, H.264 and MJPEG, MAIN STREAM 1080P (1~50/60fps WDR off), SUB STREAM D1 (1~50/60fps WDR off), THIRD STREAM HCL2GV: 1080P (1~50/60fps WDR off), HCW2GV: 1080P (1~25/30fps), EVENT OUTPUT: ONVIF, ISOM, OPERATING TEMPERATURE –30°C to 60°C (–22°F to 140°F),RELATIVE HUMIDITY 0% to 95%, non-condensing	29459.70	PRAMA	GLOBUS	INDINATUS	PRAMA	PRAMA	Not Qualified	Not Qualified
12	24CA12	2 MP Speed Dome/PTZ IP Camera- IR 200 mtr	Image Sensor: 1 /2.8"progressive Scan CMOS Sensor; Res:2048 X 1536 @25fps @25fps suppotr1-25fps; POE+; H.264; IR:200 Mtrs.; Zoom: 33x optical zoom,16 x digital zoom; WDR, IP Rating:IP67; SD card support up to 256 gb; Housing: Metal	37062.21	CPPLUS /PRAMA /MATRIX	GLOBUS	INDINATUS	PRAMA	PRAMA	Not Qualified	Not Qualified
			4MP & 5MP IP CAMERAS								
13	24CA13	4MP Dome IR(Indoor)	Res: 20fps@4MP,H.265; Lens:3.6 mm fixed lens;Image Sensor : 1/2.8" IR: 30m; WDR: True -WDR; IP Rating: IP67 , Audio compatablity should be Internal or External or higher, SD card support up to 256 gb Certificates :BIS,CE,FCC , Optional - STQC	10159.80	CPPLUS /PRAMA/MATRIX /GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
14	24CA14	4MP Bullet IR(Outdoor)	Res: 20fps@4MP, H.265; Lens:3.6 mm fixed lens ;Image Sensor : 1/2.8" , IR: 30m; WDR: True -WDR; IP Rating: IP67 , Audio compatablity should be Internal or External or higher ,SD card support up to 256 gb Certificates :BIS,CE,FCC , Optionsl : STQC	9540.30	CPPLUS /PRAMA/MATRIX / GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
15	24CA15	4MP Dome IR Varifocal	Res: 4MP (1920 x 1080) ; Lens:2.8-12mm varifocal ; Image Sensor: 1/2.9" Progressive Scan CMOS; IR range: 50 mtr ; WDR: True -WDR; Digital Noise reduction:2D; IP Rating: IP67; Power consumption:＜5W; Housing: Metal or higher ,SD card support up to 256 gb Certificates :BIS,CE,FCC , Optional : STQC	16107.00	CPPLUS /PRAMA /MATRIX /GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
16	24CA16	4MP Bullet IR Varifocal	Res: 4MP (1920 x 1080) ; Lens:2.8-12mm varifocal ; Image Sensor: 1/2.9" Progressive Scan CMOS; IR range: 50 mtr ; WDR:True -WDR; Digital Noise reduction:3D; IP Rating: IP67; Power consumption:＜5W; Housing: Metal or higher ,SD card support up to 256 gb Certificates :BIS,CE,FCC , OPTIONAL - STQC	13629.00	CPPLUS /PRAMA /MATRIX /GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
17	24CA17	4MP Speed Domes/PTZ	Image Sensor: 1/2.8" Progressive Scan CMOS, Res: 25/30fps@4M, 50/60fps@1080P, H.265; IR:150 Mtrs.; Zoom: 30x; Audio compatablity should be Internal or External ,WDR, IP Rating:IP67 or higher ,SD card storage upto 256 Gb or higher , OPTIONAL - STQC	74340.00	CPPLUS /PRAMA/MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
18	24CA18	5MP Dome IR Fixed (Indoor)	Res: 5MP@20fps; H.265; Image Sensor: 1/2.8" SONY COMS or equivalent ; Lens:4 mm fixed lens ; IR: 50m; WDR: D-WDR; 2D/3D DNR; Housing: Metal , Audio compatablity should be Internal or External or higher ,SD card storage upto 256 Gb or higher Certificates :BIS,CE,FCC - Optional : STQC	11089.05	CPPLUS /PRAMA/MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
19	24CA19	5MP Bullet IR Fixed (Outdoor)	Res: 5MP@20fps;H.265; Image Sensor:1/2.8"SONY CMOS or Equivalent ; Lens:4 mm fixed lens; IR: 50m; WDR: True-WDR; 2D/3D DNR; IP Rating: IP67; smart & Adaptive Streaming Housing: Metal, Audio compatablity should be Internal or External or higher ,SD card storage upto 256 Gb or higher Certificates :BIS,CE,FCC . OPTIONAL : STQC	11089.05	CPPLUS /PRAMA/MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
20	24CA20	5MP Dome IR Varifocal	Res: 5MP@20fps;H.265; Image Sensor:1/2.8"SONY CMOS or equivalent ; Lens:2.8 -12 mm Varifocal; IR: 50m; WDR: True-WDR; 2D/3D DNR; IP Rating: IP67; smart & Adaptive Streaming Housing: Metal, Audio compatablity should be Internal or External or higher, SD card storage upto 256 Gb or higher , Certificates :BIS,CE,FCC,N OPTIONAL : STQC	26019.00	CPPLUS /PRAMA/MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK

21	24CA21	5MP Bullet IR Varifocal(outdoor)	Res: 5MP@20fps;H.265; Image Sensor:1/2.8"OR Higher SONY CMOS or Equivalent ; Lens:2.8 -12 mm Varifocal; IR: 50m; WDR: True-WDR; 2D/3D DNR; IP Rating: IP67; smart & Adaptive Streaming Housing: Metal, Audio compatablity should be Internal or External or higher, SD card storage upto 256 Gb or higher ,Certificates :BIS,CE,FCC OPTIONAL : STQC	26019.00	CPPLUS /PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	D-LINK
22	24CA22	5MP Camera	Resolution: 5.0MP, System structure: Embedded RTOS,dual-core 32bit DSP(Hi3516D), Sensor: 5.0M 1/2.7" SC5239 CMOS sensor .color O.1LuxlFl.2.blackiwhite 0.01LuxlF1.2, Video compression: H.2G5++/H.265+/H.264 video coding: support dual stream. AVI format; support bit rate 0.IM-l0Mpbs adjustable; support frame rate 1-30fps adjustable, Image output: Main stream: 5MP 2592*1944/15fps;4MP 2560*1440/25fps;3MP 2048*1536/25fps;sub-stream: 704*576/25fps: Day&Night : IR cut filter with auto switch, Network interface 1*RJ4.5 10/1OQMadaptive Ethernet port; support RTSP/FTPIPPPOElDHCP/ DDNSINTP /UPnP etc, ONVIF Support, Lens :Fixed Lens 3.6mm, IR LED 18 PCS SMD LED, IR Distance 30m Waterproof IP6G.	12390.00	CPPLUS /PRAMA	CPPLUS	INDINATUS	PRAMA	PRAMA	CPPLUS	Not Qualified
			8MP & Other IP CAMERAS								
23	24CA23	8MP Bullet Motorised Varifocal	8MP IR Bullet Camera with 2.8-12mm Motorized Varifocal Lens; IR : 50 Mtr WDR: True-WDR; IP Rating: IP67; smart & Adaptive Streaming , SD Card Suupport up to : 512GB Certificates :BIS,CE,FCC,IK10 - Optional - STQC Housing: Metal, Audio compatablity should be Internal or External or higher	32214.00	CPPLUS /PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	PRAMA	PRAMA	CP PLUS	Not Qualified
24	24CA24	8MP Dome Motorised Varifocal	8MP IR Dome Camera with 2.8-12mm Motorized Varifocal Lens; IR : 50 Mtr WDR: True-WDR; IP Rating: IP67; smart & Adaptive Streaming ,SD Card Suupport up to : 512GB Housing: Metal, Audio compatablity should be Internal or External or higher Certificates :BIS,CE,FCC,IK10 , Optional - STQC	30975.00	CPPLUS/PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	PRAMA	PRAMA	CP PLUS	Not Qualified
25	24CA25	Full HD Body Worn Camera	1080P Full HD Recording and Streaming,2.0 inch touch screen supported, Support built-in 4G for live video transmission, Support built-in Wi-Fi, Support built-in GPS for live tracking, Support two-way audio communication ,IP67, Replaceable lithium battery,Built-in battery for hot-swappable function or higher	14248.50	CPPLUS /PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	PRAMA	PRAMA	CP PLUS	Not Qualified
26	24CA26	3MP Full HD Body Worn Camera	Supports 2304 x 1296P HD recording, Supports 32MP Capture, Support 140 degree wide angle, Support night vision and motion detection, Support external Camera, Support built-in GPS for history tracking, Drop-resistance 2 meters, Support video tagging function or higher	13381.20	CPPLUS	CP PLUS / GLOBUS	INDINATUS	Not Qualified	Not Qualified	CP PLUS	Not Qualified
27	24CA27	ANPR Camera 1	•5 Megapixel Resolution @ 60FPS •Sony Starvis Sensor •H.265/H.264 Support •Motorized Varifocal Camera 2.7mm – 13.5m •30-40 Meter IR Illumination •Corridor mode •microSD Card Slot (Max 256GB) •IP67 •DC12V or PoE Power •ONVIF Profile S •WDR 120dB	16850.40	PRAMA	CP PLUS / GLOBUS	INDINATUS	PRAMA	PRAMA	CP PLUS	Not Qualified
28	24CA28	ANPR Camera 2	4 MP starlight CMOS sensor,· H.265 and H.264 dual codec.,· Maximum resolution: 2688 × 1520 @25 fps.· Built-in 10 mm–50 mm motorized vari-focal lens.· The maximum illumination distance is 30 m.· Lane coverage : 1-2 lanes, · Capture speed range : 5~120KM/h, · Capture rate: >99% · LPR accuracy: >98%, , Supports maximum 256 GB TF card local storage, Audio In & Out optional ,IP 67	49064.40	CPPLUS /PRAMA	CP PLUS / GLOBUS	INDINATUS	PRAMA	PRAMA	CP PLUS	Not Qualified
29	24CA29	illuminator FOR Camera	Adjustable IR intensity , Wavelength Type:850 nm semi-covert,Beam Angles:15°, Casing :Aluminum and Polycarbonate, IR distance :120 meter or better, IP67, Operating Temp : 0 to 50° deg,	11398.80	COMPATIBLE	CP PLUS / GLOBUS	EQUIVALENT	EQUIVALENT	EQUIVALENT	CP PLUS	Not Qualified

#	Code	Product	Specification	Price	Col1	Col2	Col3	Col4	Col5	Col6	Col7
30	24CA30	Face Detection camera	1/1.8" progressive scan CMOS• Full HD1080p video, up to 60fps• 2.8 to 12 mm and 8 to 32 mm motor-driven lens optional• 140dB WDR• Alarm I/O• Color: 0.002 Lux @(F1.2, ADC On)• H.265, H.264, H.264+• IR range: up to 50 m for 2.8 to 12 mm lens and up to 100 m for 8 to 32 mm lens• IP67, IK10• High accuracy face detection and capture, which adopts new face detection, tracking and grading algorithms powered by deep-learning technology• Perimeter protection, based on deep learning powered target detection and classification algorithms, supports line crossing, intrusion, region entrance, and region exit• Five defined streams and up to five custom streams• Built-in microSD/SDHC/SDXC card slot, up to 256 GB or higher	27753.60	CPPLUS /PRAMA	CP PLUS / GLOBUS	Not Qualified	PRAMA	PRAMA	CP PLUS	Not Qualified
31	24CA31	People Counting Camera	1/3" Progressive Scan CMOS, Dual lens, dual CPU, support stereo views, 2 mm/2.8 mm/4 mm lens, optional, Max. resolution 640 × 960, H.264, Flash memory storing people counting data, 3D digital noise reduction, 12 VDC/PoE, Up to 5 m IR range, IP67 or higher	27258.00	CPPLUS	CP PLUS / GLOBUS	INDINATUS	Not Qualified	Not Qualified	CP PLUS	Not Qualified
32	24CA32	Thermal Camera	• 160 × 120 (the resolution of output image is 320 × 240) resolution sensor, high sensitivity sensor, support contrast adjustment• Shutter adjustment in various modes• 3D DNR, 15 palettes of color adjustable, image detail enhancement• Mirror image, digital zoom ×2, ×4, ×8, and local output• Leading image processing technology: Adaptive AGC, DDE, 3D DNR, NETD less than 40 mk (@25°C,F#=1.1)• Powerful behavior analysis function, based on deep learning algorithm: Line crossing, Intrusion, Region Entrance & Exit• Reliable temperature exception alarm function• Advanced fire detection algorithm• Bi-spectrum image fusion, picture in picture preview or higher	475156.50	Not Qualified	Not Qualified	INDINATUS	Not Qualified	Not Qualified	Not Qualified	Not Qualified
CB			**CATEGORY CB- NVR**								
33	24CB1	NVR 1 SATA-4ch	Channels: 4ch.; Recording/transfer rate: 80 Mbps; Prev/Playback:Up to 8 MP Resolution for Preview and Playback., HDD: 10 TB or Higher	7310.10	CPPLUS /PRAMA /MATRIX /GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK
34	24CB2	NVR 2 SATA-8ch	Channels: 8ch.; Recording/transfer rate: 80 Mbps; Prev/Playback:Up to 8 MP Resolution for Preview and Playback.HDD: 10 TB or Higher	15970.71	CPPLUS /PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK
35	24CB3	NVR 2 SATA-16ch	Channels: 16ch.; Recording/transfer rate: 80 Mbps; Prev/Playback:Up to 8 MP Resolution for Preview and Playback.HDD: 10 TB or Higher	17797.00	CPPLUS /PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK
36	24CB4	NVR 2 SATA-32ch	Channels: 32ch.; Recording/transfer rate: 200Mbps; Prev/Playback:Up to 8 MP Resolution for Preview and Playback.HDD: 10 TB or Higher	22258.64	CPPLUS /PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK
37	24CB5	NVR 4 SATA-16ch	Channels: 16ch.; Recording/transfer rate: 200Mbps; Prev/Playback:Up to 8 MP Resolution for Preview and Playback.HDD: 24 TB or Higher	20247.74	CPPLUS /PRAMA /GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK
38	24CB6	NVR 4 SATA-32ch	Channels: 32ch.; Recording/transfer rate: 200Mbps; Prev/Playback:Up to 8 MP Resolution for Preview and Playback.HDD: 24 TB or Higher	50799.00	CPPLUS /PRAMA /MATRIX	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK
39	24CB7	NVR 8 SATA-32ch	Maximum 320Mbps bitrate Input• 200Mbps bitrate input (RAID enabled)• Support 3rd party network cameras• Up to 12MP resolution recording• Support H.264/H.264+/H.265 video format• 2x HDMI & Support RAID0, 1, 5, 10• Support redundant power supply• Dual digital network interfaces• 8x SATA, 1x eSATA, 2x USB2.0, 1x USB3.0• 19-inch rack-mounted 2U chassis, 4 Bay HDD, upto 128 Cam support,Supports upto 32TB	65728.95	CPPLUS /PRAMA /GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK
40	24CB8	NVR 4 SATA-64ch	Up to 64 channel IP camera input,Max 320Mbps incoming bandwidth,Smart H.265/Smart H.264+/H.264/MJPEG,Up to 12Mp resolution preview and playback,Support 4 SATA HDDs up to 32TB, 3 USB Ports (2 Rear USB3.0,1 Front USB2.0),2 HDMI / VGA simultaneous video output,Support Multi-brand network cameras,ONVIF Version 2.4 conformance,Mobile Software: OEM OR THIRD PARTY MOBILE Application SOFTWARE	71862.00	CPPLUS /GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK	Not Qualified	CP PLUS	DLINK
41	24CB9	NVR 8 SATA-64CH	Up to 64 channel IP camera input, Max 640Mbps Total bandwidth, Smart H.265/Smart H.264+/H.264/MJPEG,Up to 12Mp resolution preview and playback, 8 SATA III Ports, up to 8TB capacity for each HDD, 4 USB(2 USB3.0, 2USB2.0), 2 HDMI simultaneous video output, Support Multi-brand network cameras, ONVIF Version 2.4 conformance, Support RAID 0/1/5/6/10, Mobile Software:OEM OR THIRD PARTY MOBILE Application SOFTWARE	91066.50	CPPLUS /PRAMA /MATRIX/GLOBUS	CP PLUS / GLOBUS	INDINATUS	D-LINK/PRAMA	PRAMA	CP PLUS	DLINK

#	Code	Item	Specifications	Price							
42	24CB10	NVR 24 SATA-4K Output	Third-party network cameras supported • Up to 12 Megapixels resolution recording • Video outputs at up to 4K (4096*2160) resolution •Supports decoding up to 20 channels at 1080P resolution • Up to 128/256 IP cameras can be connected with 512M/768M incoming bandwidth • Up to 24 SATA interfaces• Supports ,H.264,MPEG4,H.265,MJPEG video format• Support redundant power supply to improve the system stability • Support HDD hot swap with RAID0,1,5,6,10 storage scheme configurable •Support various VCA detection alarm and VCA search ,OEM OR THIRD PARTY MOBILE Application SOFTWARE	1387680.00	CPPLUS	CP PLUS / GLOBUS	INDINATUS	Not Qualified	Not Qualified	CP PLUS	Not Qualified
43	24CB11	NVR 4 SATA, Pro series Equipped for ANPR/PPL counting /heat Mapping/Intrusion..etc	PROFESSIONAL NVR FOR , ANPR /PPL counting /heat Mapping/ Intrusion..etc, 4 SATA , Max 10 TB Per Bay or higher , 40 TB Min or higher / Interoperability: ONVIF 2.4, SDK, CGI, Ports: USB 3 USB Ports (2 Rear USB 3.0 , 1 Front USB 2.0), RS232 1 Port, for PC Communication and Keyboard, RS485 1 Port, for PTZ Control, Interface: 2 RJ-45 Ports (10/100/1000Mbps),Independent or Joint Working	52533.60	CPPLUS	CP PLUS / GLOBUS	Not Qualified	Not Qualified	Not Qualified	CP PLUS	Not Qualified
			CATEGORY CC- ENTERPRISES NVR WITH VMS								
44	24CC1	32 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots	32 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots • 32 IP Channel Inputs; 5 Login Users; Display: 1 x VGA and 2 x Display Port • Dual Input Hot Swap Redundant (1+1) Power Supply • 8 Hot Swap 3.5"/2.5" SATA HDD/SSD Drive Bay (up to 18TB Capacity, Hard Disk Not Included) •Onvif & Major Brand Camera Support with 12MP, 8MP, 5MP,3MP, 2MP, 1080P, D1 & CIF Recording, 1 x 4k/4 x 1080P/9 x 720P/16 x D1 Local Decoding • 4x 1 GbE Lan port ; 512 Mbps Uplink & 512 Mbps Downlink • H.265/H.264/MJPEG Video Compression, Adaptive Recording and 3 Level Data Backup Policies • Remote and Centralized Viewing and Management and Mobile Clients • Multi-stream Support, Real Time Notification using SMS & Email Certificate : BIS,CE,FCC	605871.00	MATRIX	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
45	24CC2	64 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots	64 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots • 64 IP Channel Inputs; 5 Login Users; Display: 1 x VGA and 2 x Display Port • Dual Input Hot Swap Redundant (1+1) Power Supply • 8 Hot Swap 3.5"/2.5" SATA HDD/SSD Drive Bay (up to 18TB Capacity, Hard Disk Not Included) • 4x 1 GbE Lan port ; 512 Mbps Uplink & 512 Mbps Downlink • Onvif & Major Brand Camera Support with 12MP, 8MP, 5MP,3MP, 2MP, 1080P, D1 & CIF Recording • 1 x 4k/4 x 1080P/9 x 720P/16 x D1 Local Decoding • H.265/H.264/MJPEG Video Compression, Save Storage Additionally using Adaptive Recording and 3 Level Data Backup Policies • Remote and Centralized Viewing and Management and Mobile Clients • Multi-stream Support, Real Time Notification using SMS & Email Certificate : BIS,CE,FCC	650475.00	MATRIX	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified

Sr	Code	Item Name	Description	Price							
46	24CC3	128 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots	•128 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots • 128 IP Channel Inputs; 5 Login Users; Display: 1 x VGA and 2 x Display Port • Dual Input Hot Swap Redundant (1+1) Power Supply • 8 Hot Swap 3.5"/2.5" SATA HDD/SSD Drive Bay (up to 18TB Capacity, Hard Disk Not Included) • 4x 1 GbE Lan port ; 512 Mbps Uplink & 512 Mbps Downlink •Onvif & Major Brand Camera Support with 12MP, 8MP, 5MP,3MP, 2MP, 1080P, D1 & CIF Recording •1 x 4k/4 x 1080P/9 x 720P/16 x D1 Local Decoding •H.265/H.264/MJPEG Video Compression, Save Storage Additionally using Adaptive Recording and 3 Level Data Backup Policies • Remote and Centralized Viewing and Management and Mobile Clients • Multi-stream Support, Real Time Notification using SMS & Email Certificate : BIS,CE,FCC	774375.00	MATRIX	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
47	24CC4	256 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots	256 Channel Enterprise Range Server Grade NVR with 4K Support and 8HDD Slots • 256 IP Channel Inputs; 5 Login Users; Display: 1 x VGA and 2 x Display Port • Dual Input Hot Swap Redundant (1+1) Power Supply • 8 Hot Swap 3 5"/2 5" SATA HDD/SSD Drive Bay (up to 18TB Capacity, Hard Disk Not Included) • 4x 1 GbE Lan port ; 512 Mbps Uplink & 512 Mbps Downlink • Onvif & Major Brand Camera Support with 12MP, 8MP, 5MP,3MP, 2MP, 1080P, D1 & CIF Recording • 1 x 4k/4 x 1080P/9 x 720P/16 x D1 Local Decoding •H265/H264/MJPEG Video Compression, Save Storage Additionally using Adaptive Recording and 3 Level Data Backup Policies • Remote and Centralized Viewing and Management and Mobile Clients • Multi-stream Support, Real Time Notification using SMS & Email Certificate : BIS,CE,FCC	1065540.00	MATRIX	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
48	24CC5	Enterprise Video Storage for IP Surveillance (48-HDD bay)	...for high performance intel processor ; Double storage controller, Memory4GB by default(Optional Extension 128GB SSD), Operating SystemEmbedded LINUX, User InterfaceWeb Working Mode , Video Stream Mode320-channel (640Mbps) incoming and recording , 160-channel (320Mbps)forwarding, 32-channel (64Mbps) playback, Transfer Mode4096Mbps front-end connection 4096Mbps network transfer, IP SAN ModeStorage bandwidth ≤2.7Gbps, Write-through: 320Mbps;Write-back:480Mbps, HDD Amount48 HDDs, Up to 10 TB capacity for each HDD, SATA HDD composite connection miniSAS2 mini SAS ports, for storage extension, HDD InstallationAdditional HDD bracket, HDD hot-swap, HDD online replacement, HDD ModeSingle, RAID 0/1/3/4/5/6/10/50/60(Enterprise-level HDDs are recommended), JBOD, hotspare, HDD ManagerNon-working HDD hibernation to guarantee sound ventilation, reduce power consumption and enhance HDD life span, HDD bad track mapping to enhance HDD life span, RAID RebuildDynamically adjust RAID rebuild speed to guarantee system load balance, Logic Volume ManagerSupport iSCSI volume management, NAS(SMB/NFS/FTP) volume management, SnapshotSupport snapshot function, create user volume to back data., Extract FrameSupport extracting P frame function. Customizied extracting period and frame rate setup., Cluster Service N+M cluster service, ANRAfter isconnection, system can download the record file from the SD card on the network camera to maintain the full record file., Shortcut RAID Creation Click one button to create RAID conveniectly., Playback & Backup , Search ModeTime/Date, Channel, Alarm, MD and Exact Search (accurate to second), Playback FunctionPlay, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom, Backup ModeUSB Device/Network/eSATA Device Third-party SupportDahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and more Recording IP Camera Input320 Channel, Record Rate640 Mbps Record ModeManual, Schedule(Regular, Continous), Motion Detection, Alarm,Record Interval1 ~ 120 min(default 60 min),Pre-record 1 ~ 30 sec, Post-	836325.00	CPPLUS	CP PLUS	Not Qualified	DLINK	Not Qualified	Not Qualified	DLINK
49	24CC6	1TB NAS Enterprise Hard Drive	Compataible for installion on all the storage devices	6133.05	TOSHIBA/WD/SEAGATE	Not Qualified	Not Qualified	Segate/WD/Toshiba	Not Qualified	Not Qualified	Segate/WD/Toshiba
50	24CC7	2TB NAS Enterprise Hard Drive	Compataible for installion on all the storage devices	8363.25	TOSHIBA/WD/SEAGATE	Not Qualified	Not Qualified	Segate/WD/Toshiba	SEAGATE / WD	SEAGATE / WD	Segate/WD/Toshiba

#	Code	Item	Description	Price							
51	24CC8	3TB NAS Enterprise Hard Drive	Compataible for installion on all the storage devices	10841.25	TOSHIBA/WD/SEAGATE	Not Qualified	Not Qualified	Segate/WD/Toshiba	Not Qualified	Not Qualified	Segate/WD/Toshiba
52	24CC9	4TB NAS Enterprise Hard Drive	Compataible for installion on all the storage devices	11832.45	TOSHIBA/WD/SEAGATE	Not Qualified	Not Qualified	Segate/WD/Toshiba	SEAGATE / WD	SEAGATE / WD	Segate/WD/Toshiba
53	24CC10	6TB NAS Enterprise Hard Drive	Compataible for installion on all the storage devices	20443.50	TOSHIBA/WD/SEAGATE	Not Qualified	Not Qualified	Segate/WD/Toshiba	SEAGATE / WD	SEAGATE / WD	Segate/WD/Toshiba
54	24CC11	8TB NAS Enterprise Hard Drive	Compataible for installion on all the storage devices	27258.00	TOSHIBA/WD/SEAGATE	Not Qualified	Not Qualified	Segate/WD/Toshiba	SEAGATE / WD	SEAGATE / WD	Segate/WD/Toshiba
55	24CC12	10TB NAS Enterprise Hard Drive	Compataible for installion on all the storage devices	34692.00	TOSHIBA/WD/SEAGATE	Not Qualified	Not Qualified	Segate/WD/Toshiba	SEAGATE / WD	SEAGATE / WD	Segate/WD/Toshiba
			HIGH END CAMERAS , NVR,VMS FOR CRITICAL INSTALLATIONS WITH DATA SECURITY ,ACCURACY,AI ANALYTICS								
56	24CC13	SITC OF People Counting Camera	Supply of 2MP Outdoor Dome camera with 1/2.8-inch CMOS, Effective pixels 1920 (H) x 1080 (V), 60fps,Sensitivity – (Measured according to IEC 62676 Part 5 Color 0.021 lx Mono 0.004 lx With IR 0.0 lx,120 dB Dynamic range,Electronic Day/Night, Automatic Electronic Shutter (AES), H.265, H.264 MP (Main Profile); M-JPEG Video compression, White balance, Backlight Compensation, Privacy Mask,Rule based alarms and tracking, Line crossing, Enter /leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, , Object classes (Upright persons, Vehicles) detect up to 64 objects simultaneously, Audio detection (if microphone used),3.2 to 10 .5 mm Automatic Varifocal (AVF) lens, MicroSD card slot for edge recording, Motion, tamper and audio detection, FTP, IR range upto 45mtrs, ONVIF Profile S & G & T, PoE, NEMA 4X,IP54, IK10, CE, FCC, UL certified. SD card support up to 2TB.Camera should be able to count number of people with minimum 60 people at a time in scene in both moving and static condition with more than 90%accuracy. It should not give false alarms caused by challenging environment such as rain, wind(moving trees), water reflection, hails shadows etc. Camera should also reliably classify person, vehicle in scene. . Additional features if required:- 1. Camera should be suited for reliable long-range intrusion detection, alongside perimeters of buildings, energy facilities, and airports even in extreme weather conditions. It should have facility to detect an intruders who rolls, crawls or camouflage themselves. Camera should intelligently adapt to challenging situations like lighting differences or environmental conditions, such as rain, snow, clouds, blowing leaves, and shaking cameras. POC to be given to demonstrate above features. 2. Camera should detect cars, trucks, buses, motorcycles, bicycles, and pedestrians. It should allow for traffic monitoring at intersections, highways, and tunnels. Should have detection capabilities in congested scenes for accurately counting vehicles at traffic lights or in traffic jams. Automatic detection of safety risks and other traffic events include alerts	185850.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
57	24CC14	SITC OF Thermal Camera	Supply of Thermal PTZ Camera with simultaneous (dual) thermal/optical video output; 640x480 pixels thermal resolution with 50 mm lens. Human detection range up to 982 m; Robust design rated to an industry-leading IP68/NEMA 6P/IK10; VISUAL CAMERA: 1/2.8-type Exmor R CMOS sensor, 30x Zoom(4.3 mm to 129 mm), 12x Digital Zoom, Full HD 1080p resolution, Gain Control,Sensitivity @ 30IRE- Sense up on-0.0077 lx @ day mode & 0.0008 lx @ night mode, Electronic Shutter,WDR, SNR >50 dB, 120dB HDR, THERMAL CAMERA: Focal Plane Array (FPA), un-cooled Vanadium Oxide microbolometer, 1x-4x digital zoom, Thermal Sensitivity (NEDT)<72mk; Spectral Response 8 to 14 μm; Pan Range 360° cont., Tilt Angle-292° (upright orientation); Tilt Range: -56° - +90° (upright orientation), -90° - +56° (inverted orientation); Pre-position Speed- 120°/second, –40°C to 65°C operating temperature, Humidity-0% to 100%, Any object, Object in field, Crossing line, Entering field, Leaving field, Loitering, Following route, Idle object, Removed object, Counter, Occupancy, Crowd detection, Condition change, Similarity search, Tampering, Object filters based on Duration, Size, Aspect ratio v/h, Speed, Direction, Color, Object classes (Upright persons, Bikes, Cars, Trucks), Auto tracking, Camera trainer, CE,UL,FCC certified.	7048671.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified

58	24CC15	SITC OF 4 MP IR PTZ Camera-320 MTR	Supply of 4MP IR PTZ Camera with 1/1.8" progressive scan CMOS, Effective pixels 2688 x 1520 (4 MP), 60fps, 30x Optical Zoom (6.6 mm to 198 mm)(F1.5 to F4.8), 16X Digital Zoom, Minimum Illumination- Color: 0.0101 lux , B/W: 0.0016 lux, IR: 0 lux; IR distance 320m; White light illuminator 60m; 133dB HDR, H.265, H.264, MJPEG streams, Intelligent Dynamic Noise Reduction, BLC, White Balance, Pan Range 360° continuous, Tilt Range -90° to 5° (Auto-flip 190°), Pan/Tilt Modes - Pan: 0.1°/s - 240°/s; Tilt: 0.1°/s - 100°/s, Presets 256, Tours, Audio- 1/1 Channel In/Out, Micro SD card support up to 2TB, 32 individually configurable privacy masks, Alarm inputs/outputs - 2/1, Dual Power options, Any object, Object in field, Crossing line, Entering field, Leaving field, Loitering, Following route, Idle object, Removed object, Counter, Occupancy, Crowd detection, Condition change, Similarity search, Tampering, Object filters based on Duration, Size, Aspect ratio v/h, Speed, Direction, Color, Object classes (Upright persons, Bikes, Cars, Trucks), IP67 , IK10 ONVIF Profiles S & G & T, FCC, CE, UL Certified. In-built rain-sensing Wiper.	557550.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
59	24CC16	SITC OF 5 MP OUTDOOR DOME	Supply of 5 MP Outdoor Dome camera with 1/2.9-inch CMOS, Effective pixels 2592 x 1944 (5 MP), 30 fps sensitivity – (Measured according to IEC 62676 Part 5 (1/25, F1.3) Color 0.379 lx Mono 0.042 lx With IR 0.0 lx, 120 dB Dynamic range,Electronic Day/Night, Automatic Electronic Shutter (AES), H.265, H.264 MP (Main Profile); M-JPEG Video compression,White balance, Backlight Compensation, Privacy Mask,Rule based alarms and tracking, Line crossing, Enter /leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation,3D tracking based on Duration, Size, Aspect ratio v/h, Speed, Direction, Color, Object classes (Upright persons, Bikes, Cars, Trucks),3 to 10 mm Automatic Varifocal (AVF) lens, MicroSD card slot for edge recording, Motion, tamper and audio detection, FTP, IR range upto 45 mtrs Dropbox and e-mail applications, 3 axis adjustment, ONVIF Profile S, G,T & M PoE,IP67, IK10, CE, FCC, UL certified. SD card support up to 2TB.Camera should be able to count number of people with minimum 60 people at a time in scene in both moving and static condition with more than 90%accuracy. It should not give false alarms caused by challenging environment such as rain, wind(moving trees), water reflection, hails shadows etc. Camera should also reliably classify person, vehicle in scene. . Additional features if required:- 1. Camera should be suited for reliable long-range intrusion detection, alongside perimeters of buildings, energy facilities, and airports even in extreme weather conditions. It should have facility to detect an intruders who rolls, crawls or camouflage themselves. Camera should intelligently adapt to challenging situations like lighting differences or environmental conditions, such as rain, snow, clouds, blowing leaves, and shaking cameras. POC to be given to demonstrate above features. 2. Camera should detect cars, trucks, buses, motorcycles, bicycles, and pedestrians. It should allow for traffic monitoring at intersections, highways, and tunnels. Should have detection capabilities in congested scenes for accurately counting vehicles at traffic lights or in traffic jams. Automatic detection of safety	173460.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified

| 60 | 24CC17 | SITC OF 5 MP Bullet IR | Supply of 5MP IR Bullet camera with 1/2.9-inch CMOS, Total sensor pixels 2592 (H) × 1944 (V)); up to 30fps; Sensitivity – Measured according to IEC 62676 Part 5 (1/30, F1.6), Color 0.379 lx, Mono 0.042 lx, With IR 0.0 lx, 120dB WDR, H.265; H.264; M- JPEG, Automatic Electronic Shutter (AES); Intelligent Dynamic Noise Reduction, Intelligent Defog,Rule based alarms and tracking, Line crossing, Enter / leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, 3D tracking based on Duration, Size, Aspect ratio v/h, Speed, Direction, Color, Object classes (Upright persons, Bikes, Cars, Trucks), Privacy Masking, Pixel counter, Memory card slot, IR Range 60 mtr, Automatic Varifocal 3.2 to 10 mm, Alarm Input 1/1, Audio Input/output, RJ45, G.711, Audio Streaming Full-duplex / half duplex, ONVIF Profile S, G & T, IP67, IK10, PoE, CE, FCC, UL certified SD card support up to 2TB. FTP, Dropbox and e-mail applicationsCamera should be able to count number of people with minimum 60 people at a time in scene in both moving and static condition with more than 90%accuracy. It should not give false alarms caused by challenging environment such as rain, wind(moving trees), water reflection, hails shadows etc. Camera should also reliably classify person, vehicle in scene. .

Additional features if required:-
1. Camera should be suited for reliable long-range intrusion detection, alongside perimeters of buildings, energy facilities, and airports even in extreme weather conditions. It should have facility to detect an intruders who rolls, crawls or camouflage themselves. Camera should intelligently adapt to challenging situations like lighting differences or environmental conditions, such as rain, snow, clouds, blowing leaves, and shaking cameras. POC to be given to demonstrate above features.

2. Camera should detect cars, trucks, buses, motorcycles, bicycles, and pedestrians. It should allow for traffic monitoring at intersections, highways, and tunnels. Should have detection capabilities in congested scenes for accurately counting vehicles at traffic lights or in traffic jams. Automatic detection of safety | 185850.00 | BOSCH | Not Qualified | Not Qualified | Not Qualified | Not Qualified | Not Qualified | Not Qualified |
| 61 | 24CC18 | 20 MP -Dome with 4 x 5MP Cameras ,for 360 degree coverage OUTDOOR | External Dome Camera - with 4 Cam 360 Viewing : Four 5 MP imagers at 30 fps in one camera on
a single IP address , 3.7-7.7mm, Sensor Type -4x 1/2.7-inch CMOS,H.265, H.264 MP (Main Profile,IR -30 mtr,   Easy and flexible installation with four motorized zoom/focus lenses High Dynamic Range (HDR) to see every detail in both bright and dark areas of the scene ,Built-in Intelligent Video Analytics to trigger
relevant alerts and quickly retrieve data,u Integrated surround IR illumination up to 30 m
distance for pitch dark scenes, 20-megapixel multi-directional overviews Four independent 5-megapixel imagers with separate
remote zoom and focus lenses capture very highquality images with a total resolution of 20 megapixels.
Each of the four imagers can be set-up flexibly with
3-axis movement along a circular track. This enables
surround coverage, capturing detailed images from
every angle for comprehensive video coverage with
four separate views from a single IP address, Viewing Angle- Up to 360° coverage (depending on lens position
and tilt) , intelligent Alaytics ,Alarm Rules -Any object, Object in field, Line crossing, Enter /
leave field, Loitering, Follow route, Idle / removed object, Counting, Occupancy, Crowd
density estimation, Condition change, Similarity
search, Flow / counter flow, Micro SDXC / SDHC / SD card upto 2TB, safety : CE, FCC, UL, WEEE, RCM, VCCI, CMIM, UKCA,
RoHS, EAC, BIS, EN 60529 (IP67) and UL50E (NEMA Type 4X), IP 66 & K10 | 481971.00 | BOSCH | Not Qualified | Not Qualified | Not Qualified | Not Qualified | Not Qualified | Not Qualified |

62	24CC19	Panaromic 360 Degree Viewing camera	Fixed dome 6MP 360º IP66 IR, 360° panoramic overview in 6MP resolution without blind spots , Built-in Intelligent Video Analytics and Intelligent Audio Analytics to trigger relevant alerts and quickly retrieve data , Sensor - 1/1.8-inch CMOS ,IR -20 mtr , WDR feature inbuilt , Detect 25 px/m (8 px/ft) 28 m/ 93 ft Observe 63 px/m (19 px/ft) 11.5 m/ 38 ft Recognize 125 px/m (38 px/ft) 5.5 m/ 18 ft Identify 250 px/m (76 px/ft) 2.1 m/ 7 ft , Video compression H.265; H.264; M-JPEG, E-PTZ and regions of interest The remote E-PTZ (Electronic Pan, Tilt and Zoom) controls allow you to select specific areas of the full image circle. These Regions of Interest (ROI) can be easily defined, allowing the most interesting part of a scene to be monitored separately. Audio and Video Analytics feature availability with Camera , Onvif profiles as per OEM , Micro SDXC / SDHC / SD card upto 2TB, safety : CE, FCC, UL, WEEE, RCM, VCCI, CMIM, UKCA,RoHS, EAC, BIS, EN 60529 (IP67) and UL50E (NEMA Type 4X), IP 67 & K10	179655.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
63	24CC20	8MP IR Dome Camera	Supply of 8MP UHD Indoor Dome camera with 1/2.8-inch CMOS, Effective pixels 3840 x 2160 (8MP), 30 frames per second Sensitivity – (Color 0.054lx Mono 0.015lx) 120dB High Dynamic range, Electronic Day/Night, Automatic Electronic Shutter (AES), H.265, H.264 MP (Main Profile); M-JPEG Video compression, White balance, Backlight Compensation, Privacy Mask,Rule based alarms and tracking, Line crossing, Enter /leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, 3D tracking based on Duration, Size, Aspect ratio v/h, Speed, Direction, Color, Object classes (Upright persons, Bikes, Cars, Trucks), Camera Trainer (machine learning to train user specified objects), 3.9 to 10 mm Automatic Varifocal P-Iris (AVF) lens, IR range -40 mtr, Dual MicroSD card slot for edge recording, Motion, tamper and audio detection, FTP, Dropbox and e-mail applications, 3 axis adjustment, ONVIF Profile S, G, M & T, PoE, CE, FCC , UL certified. SD card support up to 2TB. IP67, NEMA 4X & IK10.Camera should be able to count number of people with minimum 60 people at a time in scene in both moving and static condition with more than 90%accuracy. It should not give false alarms caused by challenging environment such as rain, wind(moving trees), water reflection, hails shadows etc. Camera should also reliably classify person, vehicle in scene. . Additional features if required:- 1. Camera should be suited for reliable long-range intrusion detection, alongside perimeters of buildings, energy facilities, and airports even in extreme weather conditions. It should have facility to detect an intruders who rolls, crawls or camouflage themselves. Camera should intelligently adapt to challenging situations like lighting differences or environmental conditions, such as rain, snow, clouds, blowing leaves, and shaking cameras. POC to be given to demonstrate above features. 2. Camera should detect cars, trucks, buses, motorcycles, bicycles, and pedestrians. It should allow for traffic monitoring at intersections, highways, and tunnels. Should have detection capabilities in congested scenes for accurately	167265.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified

#	Item code	Item name	Description	Price							
64	24CC21	8MP IR Bullet camera	Supply of 8MP Outdoor Bullet camera with 1/1.8 inch CMOS, Effective pixels 3840 (H) x 2160 (V), 30fps, Sensitivity – (Measured according to IEC 62676 Part 5 Color 0.0540 lx Mono 0.015 lx With IR 0.0 lx, 120 dB Dynamic range, Electronic Day/Night, Automatic Electronic Shutter (AES), H.265, H.264 MP (Main Profile); M-JPEG Video compression, White balance, Backlight Compensation, Privacy Mask,Rule based alarms and tracking, Line crossing, Enter /leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, Object classes (Upright persons, Vehicles) detect up to 64 objects simulataneously, Audio detection (if microphone used), 4.40 mm – 10 mm Automatic Varifocal (AVF) lens, MicroSD card slot for edge recording,IR range -60 mtr, Motion, tamper+C3 and audio detection, FTP, IR range upto 60mtrs, ONVIF Profile S ,G,T& M , PoE, IP67,IP6K9K and NEMA 4X, IK10, CE, FCC , UL certified, SD card support up to 2TB.Camera should be able to count number of people with minimum 60 people at a time in scene in both moving and static condition with more than 90%accuracy. It should not give false alarms caused by challenging environment such as rain, wind(moving trees), water reflection, hails shadows etc. Camera should also reliably classify person, vehicle in scene. . Additional features if required:- 1. Camera should be suited for reliable long-range intrusion detection, alongside perimeters of buildings, energy facilities, and airports even in extreme weather conditions. It should have facility to detect an intruders who rolls, crawls or camouflage themselves. Camera should intelligently adapt to challenging situations like lighting differences or environmental conditions, such as rain, snow, clouds, blowing leaves, and shaking cameras. POC to be given to demonstrate above features. 2. Camera should detect cars, trucks, buses, motorcycles, bicycles, and pedestrians. It should allow for traffic monitoring at intersections, highways, and tunnels. Should have detection capabilities in congested scenes for accurately counting vehicles at traffic lights or in traffic jams. Automatic detection of safety	180894.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
65	24CC22	NVR 4 SATA-32ch	Supply of all-in-one recording, viewing and management solution for network surveillance systems for up to 32 channels, Pre-installed, pre-configured IP storage solution, with optional support of RAID-1,Dedicated storage operating system delivers robust , secure operation, Advanced user and alarm management,Intel® Core™ i3-10100E(6 MB Intel® Smart Cache,3.20 GHz),8GB DDR4-2666 1RX8 LP SODIMM, compact mini tower,2 Trays:3.5-inch SATA 3,max 18TB per HDD slot maximum supported,6 USB ports;Intel onboard graphics (Three digital outputs),Microsoft Windows Server IoT 2022 for Storage UL, CE Certified.2 x RJ45 Gigabit Ethernet LAN ports (teamed);Operating temperature (°C) 0°C to +40°C; Operating relative humidity, noncondensing (%) 8 - 90%. Video Managment software In-built (Server-client architecture) with Live viewing of multiple cameras, Local recording and snapshots, PTZ control and digital zoom, Playback and export from storage, Motion and forensic search, Multi-screen grid selection (1, 2X2, 3X3 and 4X4), Sequencing selection), favorite view design.Dual authorization login,e Map support,ONVIF profile S,T complied,User management,Alarm management,SQL based database,LDAP support.Support of camera edge based analytics/server based analytics alarm triggering. Certifications UL,CB,CE,FCC,BIS.	450996.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	DLINK
66	24CC23	NVR 8 SATA-32ch	Supply of all-in-one recording, viewing and management solution for network surveillance systems for up to 32 channels, Pre-installed, pre-configured IP storage solution, with optional support of RAID-1,Dedicated storage operating system delivers robust , secure operation, Advanced user and alarm management,Intel® Core™ i3-10100E(6 MB Intel® Smart Cache,3.20 GHz),8GB DDR4-2666 1RX8 LP SODIMM, compact mini tower,2 Trays:3.5-inch SATA 3,max 18TB per HDD slot maximum supported,6 USB ports;Intel onboard graphics (Three digital outputs),Microsoft Windows Server IoT 2022 for Storage UL, CE Certified.2 x RJ45 Gigabit Ethernet LAN ports (teamed);Operating temperature (°C) 0°C to +40°C; Operating relative humidity, noncondensing (%) 8 - 90%. Video Managment software In-built (Server-client architecture) with Live viewing of multiple cameras, Local recording and snapshots, PTZ control and digital zoom, Playback and export from storage, Motion and forensic search, Multi-screen grid selection (1, 2X2, 3X3 and 4X4), Sequencing selection), favorite view design.Dual authorization login,e Map support,ONVIF profile S,T complied,User management,Alarm management,SQL based database,LDAP support.Support of camera edge based analytics/server based analytics alarm triggering. Certifications UL,CB,CE,FCC,BIS.	63808.50	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	DLINK

#	Code	Item	Description	Price							
67	24CC24	NVR 8 SATA-64CH	Supply of all-in-one recording, viewing and management solution for network surveillance systems for up to 64 channels, Pre-installed, pre-configured IP storage solution, with RAID-5 protected (RAID-5 with hot spare or RAID-6 supported),Dedicated storage operating system delivers robust , secure operation, Hot-swappable hard drives, Advanced user and alarm management,Intel® Core™ i3-10100E(6 MB Intel® Smart Cache,3.20 GHz),16GB DDR4-2933 2Rx8 ECC UDIMM, installed1 U rack mount,4 Trays:3.5-inch SATA 3,max 18TB per HDD slot maximum supported,6 USB ports;Intel onboard graphics (Three digital outputs),Microsoft Windows Server IoT 2022 for Storage UL, CE Certified.2 x RJ45 Gigabit Ethernet LAN ports (teamed);Operating temperature (°C) 0°C to +40°C; Operating relative humidity, noncondensing (%) 8 - 90%. Video Managment software In-built (Server-client architecture) with Live viewing of multiple cameras, Local recording and snapshots, PTZ control and digital zoom, Playback and export from storage, Motion and forensic search, Multi-screen grid selection (1, 2X2, 3X3 and 4X4), Sequencing selection), favorite view design.Dual authorization login,e Map support,ONVIF profile S,T complied,User management,Alarm management,SQL based database,LDAP support.Support of camera edge based analytics/server based analytics alarm triggering. Certifications UL,CB,CE,FCC,BIS.	729771.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	DLINK
			STORAGE & RECORDING SYSTEM FOR IP NETWORK SURVEILLANCE -HI END PROJECTS								
68	24CC25	Supply of all-in-one recording, viewing and management solution for network surveillance systems ,256 Channel 16 Drive Bay	Supply of all-in-one recording, viewing and management solution for network surveillance systems for up to 256 channels, Pre-installed, pre-configured IP storage solution, with RAID-5/RAID-6 protected, Dedicated storage operating system delivers robust , secure operation, Hot-swappable hard drives, Advanced user and alarm management,Intel® Xeon® E-2226GE (12 MB Intel Smart Cache, 3.4GHz) Processor, 16 GB DDR4-2666 2Rx8 ECC UDIMM memory installed, 2U/3U rack mount, 16 Trays: 3.5-inch SATA 3; max 12TB per HDD slot maximum supported, 12Gb/s SAS RAID Card, 6 USB ports; Intel onboard graphics (Three digital outputs), Windows Server IOT 2019 for storage standard (64-bit),UL, CE Certified. 2 x RJ45 Gigabit Ethernet LAN ports (teamed); 1 IPMI BMC port. Operating temperature (°C) 10 - 35°C; Operating relative humidity, noncondensing (%) 8 - 90%.	1480605.00	BOSCH	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Dlink
			VMS FOR IP SURVEILLANCE HI-END								
69	24CC26	VMS FOR HI END PROJECT SERIES CAMERAS	Supply, Installation, Testing and Commissioning of Video Managemet software with Seamless management of digital video, audio, and data across IP network. Support of central monitoring/control/playback of cameras from different locations. Alarm management, Users management, recording quality management, Schedule recording, Drag & drop ,Bookmarks,snapshot, Pop-up alarm, site maps support, virtual OEM funcationality, Live & playback video, export, logbook, sequencing, GPU Decoding, LDAP Support, Up to 4 monitors support, Dual-authorization logon, Email or SMS notification on alarm, Support for 3rd party cameras via RTSP, HTTP, MJPEG, ONVIF Profile S.	619500.00	BOSCH VMS WITH ANALYTICS	Not Qualified	Not Qualified	DLINK/PRAMA	Not Qualified	Not Qualified	Not Qualified
CD			**CATEGORY CD- RACKS & STORAGES**								
70	24CD1	RACKS 2U with rack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	2U Rack with Height 169mm, Widht 550mm, Depth 400mm with wireless mouse	3097.50	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK
71	24CD2	RACKS 4U with rack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	C Wallmount 400D With Front Glass Door Lock & Key 550 4U	3159.45	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK

72	24CD3	RACKS 4 U WATERPROOF IP67-OUT DOOR with rack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	4U Rack with Height 270mm, Widht 600mm, Depth 300mm	19824.00	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK
73	24CD4	RACKS 6U with rack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	Wallmount 450D With Front Glass Door Lock & Key 550 6U,	7186.20	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK
74	24CD5	RACKS 9U withrack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	Wallmount 9U 630D With Front Glass Door Lock & Key 550 9U - (with 1U cable Manager;Fan;6 socket PDU)	10159.80	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK
75	24CD6	RACKS 17U with rack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	17U Network Enclosure Frame-600X800-STEEL with accessories like fan, pdu, cable manager, DIN-41494 general industrial standard or equivalent ISO standard .	27258.00	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK
76	24CD7	RACKS 22U with rack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	22U Network Enclosure Frame-600X800-STEEL with accessories like fan, pdu, cable manager, DIN-41494 general industrial standard or equivalent ISO standard .	31594.50	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK
77	24CD8	RACKS 27U withrack fixing, crimping and end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	27U Network Enclosure Frame-600X800-STEEL with accessories like fan, pdu, cable manager, DIN-41494 general industrial standard or equivalent ISO standard .	35931.00	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUI VALENT	DLINK	DLINK	NET RACK	DLINK

#	Code	Item	Description	Price							
78	24CD9	42 U Floor Mount rack with necessary accessories and crimping , end terminations of patch panel fixing, 24 port switch fixing, termination of patch panel and 24 port switch using 1 mt patch chord and commissioning of the network	19" 42U floor mount rack with vented Front glass door with a fully vented rear steel door Fan Housing unit with 4 fans 230 V 90 CFM ,castors set of 4 with hardware packet (pack of 20), Equipment shelf 725 MMD, 1U PVC cable manager	68145.00	CPPLUS / NETRACK	NETRACK/ GLOBUS/DIGISOL	STARTRONIX/EQUIVALENT	DLINK	DLINK	NET RACK	DLINK
79	24CD10	Storage 2 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	6133.05	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD PURPLE	W.D. /Segate/Toshiba
80	24CD11	Storage 3 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	8053.50	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD PURPLE	W.D. /Segate/Toshiba
81	24CD12	Storage 4 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	9664.20	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD PURPLE	W.D. /Segate/Toshiba
82	24CD13	Storage 6 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	17346.00	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD PURPLE	W.D. /Segate/Toshiba
83	24CD14	STORAGE 8 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	22921.50	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD PURPLE	W.D. /Segate/Toshiba
84	24CD15	STORAGE 10 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	38409.00	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD PURPLE	W.D. /Segate/Toshiba
85	24CD16	Storage 16 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	59472.00	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD ULTRA STAR	W.D. /Segate/Toshiba
86	24CD17	STORAGE 18 TB Surveillance SATA HDD	Compataible for installion on all the storage devices	70623.00	TOSHIBA/WD/SEAGATE	SEAGATE/WD	EQUIVALENT	W.D. /Segate/Toshiba	SEAGATE / WD	WD ULTRA STAR	W.D. /Segate/Toshiba
87	24CD18	WATERPROOF outdoor RACK- 42	19 Inch 42U, Customised for housing Online UPS , External Batteries, Power Meter, MCB,Switches,cabling channel	92454.18	TOSHIBA/WD/SEAGATE	NETRACK	EQUIVALENT	DLINK	DLINK	RACKOM	DLINK
	CE		CATEGORY CE- SWITCHES & PATCH PANNEL								
88	24CE1	Smart Switch 24 Port	24-Ports 10/100/1000Mbps + 4-Ports Combo GE/SFP Smart Managed Switch	14248.50	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
89	24CE2	Smart Switch 48 Port	48-Ports 10/100/1000Mbps + 4-Ports Combo GE/SFP Smart Managed Switch	39028.50	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
90	24CE3	Managed Switch 8 Port	8-Port 10/100/1000 Base-T + 2 10/100/1000BASE SFP ports L2 Management Switch	14879.15	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
91	24CE4	Managed Switch 24 Port	24 10/100/1000Base-TX ports Access Layer 3 Switch with 4 1/10G SFP+ Ports, Supports VSF Stacking, RIP	52837.16	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
92	24CE5	Managed Switch 24 with uplink port	24 Port Gigabit Fiber Ethernet Access Layer 3 Switch with 16 100/1000Base-XSFP + 8GE Combo(RJ45/SFP)+4 10 Gigabit SFP+ Uplink Ports	52837.16	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
93	24CE6	Managed switch 48 Port	48 10/100/1000Base-TX ports Access Layer 3 Switch with 4 1/10G SFP+ Ports, Supports VSF Stacking, RIP	179655.00	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
94	24CE7	Managed switch 20 Port	24 Port 10/100/1000Mbps Layer 3 Switch includes 4 Gigabit Combo ports, additional 4 x 1G/10G SFP+ ports. 2 Fixed AC Power Supply. Supports OSPF v2/v3,BGP4+,VRRP	161359.93	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
95	24CE8	L2 Managed Switch 24 Port	L2 Switch with 24 10GbE (SFP+) ports,and 2 40G QSFP 100-240VAC + 48VDC Power Input Static routing supported	52837.16	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
96	24CE9	L3 Managed Switch 24 Port	L3 Switch with 48 10GbE (SFP+) ports and 6 40G QSFP 100-240VAC + 48VDC Power Input ,40G QSFP Transceever modules	152050.08	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
97	24CE10	L3 Managed Switch 48 Port	48 10/100/1000 Base-T ports + 2 10G Base-T ports + 4 10G SFP+ ports, L3 Stackable Managed Switch	205054.50	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
98	24CE11	L3 POE Managed Switch 24 Port	24 10/100/1000Base-TX ports POE Access Layer 3 Switch with 4 1/10G SFP+ Ports, Supports VSF Stacking, RIP, POE Wattage 370Watts	152050.08	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
99	24CE12	Smart semi-managedPOE Switch 24 Port	24 Port Gigabit Layer 2 Web Managed POE Switch with 2 Combo and 2 Gigabit SFP Ports Power Budget 270Watts	49560.00	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
100	24CE13	Smart semi-managed POE Switch 8 Port	8-Ports 10/100/1000Mbps PoE + 2-Ports SFP 100/1000Mbp Smart Managed Switch, 65Watts	19204.50	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
101	24CE14	Smart semi-managedPOE Switch 24 Port	24-Ports 10/100/1000Mbps PoE + 4-Ports Gigabit SFP Smart Managed Switch, 193Watts	47701.50	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
102	24CE15	L2 ManagedPOE Switch 24.1 Port	24 Ports 10/100/1000Mbps PoE + 4 10G ports SmartPro Switch	52837.16	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK

#	Code	Item	Description	Price							
103	24CE16	L2 managedPOE Switch 48 Port	48 PoE Ports 10/100/1000Mbps + 4 10G ports Smart Managed Switch	108288.60	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
104	24CE17	L3 managed POE Switch 24.3 Port	24 10/100/1000Base-T PoE ports + 2 10GBase-T ports + 4 10G SFP+ ports, L3 Stackable Managed Switch	117705.00	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
105	24CE18	L3 managedPOE Switch 48 Port	48 10/100/1000Base-TX ports POE Access Layer 3 Switch with 4 1/10G SFP+ Ports, Supports VSF Stacking, RIP, POE Wattage 740Watts Note: AC+48VDC RPS Power Supply	204435.00	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
106	24CE19	Switch 4 Port	4FE PoE + 2FE Uplink, 60 Watt PoE switch	4832.10	Netgear / DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
107	24CE20	Switch 8 Port	8FE PoE + 2FE Uplink, 120 Watt PoE switch	9923.15	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
108	24CE21	Switch 8 Port Unmanaged	1 K MAC Address 8x 10/100/1000 Mbps Ports Full Duplex, Auto MDI/MDI-X, IEEE 802.3, IEEE 802.3ab, IEEE 802.3x	3516.28	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
109	24CE22	Switch 8 Port POE Unmanaged	1 K MAC Address 8x 10/100/1000 Mbps Ports Full Duplex, Auto MDI/MDI-X, IEEE 802.3, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3x	8363.25	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
110	24CE23	Switch 16 Port POE Unmanaged	2 K MAC Address 16x 10/100/1000 Mbps Ports Full Duplex, Auto MDI/MDI-X, IEEE 802.3, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3x	6566.70	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
111	24CE24	Switch 24 Port Unmanaged	3 K MAC Address 24x 10/100/1000 Mbps Ports Full Duplex, Auto MDI/MDI-X, IEEE 802.3, IEEE 802.3ab, IEEE 802.3x	6195.00	Netgear /TPLINK /DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
112	24CE25	Switch 24 Port POE semi managed	3 K MAC Address 24x 10/100/1000 Mbps Ports Full Duplex, Auto MDI/MDI-X, IEEE 802.3, IEEE 802.3ab,IEEE 802.3af, IEEE 802.3x	9912.00	Netgear	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
113	24CE26	24 Port, Cat 6 Jack Panel (Loaded with UTP I/O)	Type - 24-port, Unshielded Twisted Pair, Category 6, TIA / EI Modular, PCB based and Keystone type Unshielded Twisted pair, category 6, EIA/TIA-568-C2 , The keystone modules are fire-retardant, moulded plastic modules UL94 VO rated, consisting of horizontal index strips for ease of retermination, 110 IDC Termination 180 degree Punch, allowing wires between 22 – 26 AWG sizes, Meets or Exceeds EIA/TIA –568–C.2 Category 6 connecting hardware specification, RJ45 (8P8C) T568A/T568B colour coding termination. Cable Guide way to guide the cable on the rear side, 1U size for 6/12/24 Ports and 2U for 48 Ports, UL Listed to "ANSI/TIA/ EIA-568-C2" specifications Jack Panel should be RoHS Complaint	3435.75	DIGISOL	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
114	24CE27	Access point with 50-65 users	Wireless performance New-generation IEEE 802.11ac wireless, High-speed 2300 Mbps,Dedicated Gigabit LAN port for a wired connection, Powerful Wi-Fi Multimedia Quality of Service (QoS), Load balancing to optimize performance between access Points Security 128-bit personal/enterprise encryption5, 64/128 bit WEP, MAC-based access filtering and WLAN partitioning, Captive Portal with industry-standard authentication, VLAN support for network segmentation Extensive Management Powerful management, monitoring, and troubleshooting Functionality, Flexible access through web (HTTP), SSL, SSH, and Telnet, Multiple operation modes including Access Point, Wireless Distribution System (WDS), WDS with Access Point, and Wireless Client, Wireless scheduling to manage Access Point activity	26019.00	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
115	24CE28	Access point with 10-15 users	Wireless performance New-generation IEEE 802.11ac Wave 2 wireless, High-speed 1200 Mbps throughput, Dedicated Gigabit LAN port for a wired connection, Load balancing to optimize performance between access Points Security WPA/WPA2 Personal/Enterprise encryption, 64/128 bit WEP, MAC-based access filtering and WLAN partitioning, Captive Portal with industry-standard authentication, VLAN support for network segmentation, Built-In Raduis Server Extensive Management Powerful management, monitoring, and troubleshooting Functionality, Flexible access through web (HTTP), SSL, SSH, and Telnet, Multiple operation modes including Access Point, Wireless Distribution System (WDS), WDS with Access Point, and Wireless Client, Wireless scheduling to manage Access Point activity	10841.25	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK

116	24CE29	Wifi 6 Access Point	Wi-Fi Standards ·IEEE 802.11a/b/g/n/ac/ax Supported Rates· 802.11ax: 4 to 1774 Mbps, · 802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS = 1 to 2 for VHT20/40/80), · 802.11n: 6.5 Mbps to 300Mbps (MCS0 to MCS15), · 802.11a/g: 6 to 54 Mbps, · 802.11b: 1 to 11 Mbps Wi-Fi Standards · IEEE 802.11a/b/g/n/ac/ax Supported Rates· 802.11ax: 4 to 1774 Mbps, · 802.11ac: 6.5 to 867Mbps (MCS0 to MCS9, NSS = 1 to 2 for VHT20/40/80), · 802.11n: 6.5 Mbps to 300Mbps (MCS0 to MCS15), · 802.11a/g: 6 to 54 Mbps, · 802.11b: 1 to 11 Mbps Supported Channels· 2.4GHz: 1-13, · 5GHz: 36-64, 100-144, 149-165 MIMO· 2x2 SU-MIMO,· 2x2 MU-MIMO Spatial Streams· 2 streams SU/MU MIMO 5GHz, · 2 streams SU/MU MIMO 2.4GHz Radio Chains and Streams· 2x2:2 (5GHz), · 2x2:2 (2.4GHz) Channelization · 20, 40, 80MHz Security· WPA-PSK, WPA-TKIP, WPA2 AES, WPA3-Personal, WPA3-Enterprise, 802.11i, Dynamic PSK, OWE, · WIPS/WIDS Other Wi-Fi Features· WMM, Power Save, Tx Beamforming, LDPC, STBC, 802.11r/k/v, · Hotspot, · Hotspot 2.0, · Captive Portal,· WISPr Antenna Type BeamFlex+ adaptive antennas with polarization diversity, · Adaptive antenna that provides up to 64 unique antenna patterns per band Antenna Gain (max) · Up to 3dBi Peak Transmit Power (Tx port/ chain + Combining gain)· 2.4GHz: 26 dBm · 5GHz: 25 dBm Client Density Management· Adaptive Band Balancing, · Client Load Balancing, · Airtime Fairness, · Airtime-based WLAN Prioritization SmartCast Quality of Service · QoS-based scheduling, · Directed Multicast · L2/L3/L4 ACLs Networking Mesh · SmartMesh™ wireless meshing technology. Self-healing Mesh	27877.50	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
117	24CE30	Wireless Access Point	802.11abgn/ac/ax Wireless Access Points, 2x2:2 streams (2.4GHz/5GHz) OFDMA, MU-MIMO, BeamFlex+, 802.3af PoE support, Mounting Bracket: Secure Mounting Bracket. Mounts to hard wall/ceiling, pole, and truss, PoE Injector, 10/100/1000BaseT, Power Adapter (12V, 1.0A)	27877.50	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
118	24CE31	Switching Router	WAN2 GE Combo and 2 GE-TX,LAN8 GE-TX LAN,Packet Forwarding1.75 Mpps,Encryption engineCPU integration,NORFLASH16 MB,DRAM1 GB, Power supplyBuilt-in 220VAC power supply,PowerPeak value .-s-36W,Dimensions m 300x200x44,Operating temperature 0°C — 50°C,Operating humidity5% — 95% (non-condensing),MulticastIGMP PIM-DM, PIM-SM, DVMRP,MPLSAToM, MP-BGP, VRF L2VPN, L3VPN,Congestion managementFIFO, PQ, CQ, WFQ, CBWFQ,Congestion avoidanceWRED/RED,Traffic shapingGTS,Network managementSNMP, MI B, SYSLOG, RMON, HTTP management,	105562.80	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
119	24CE32	Layer-2 Managed Switch(28-Port)	1000Base-T Interface24, Combo 1000Base-T/SFP4, Auto MDI/MDIXYes (copper ports) Console PortYes, Max. Packet Forwarding Rate41.67 Mpps, Switching Capacity56 Gbps, Dimension440 x 210 x 44mm, Weight2.00 kg, Operation Temperature-5 -50°C Storage Temperature-20-70°C, Operation Humidity0 ~ 95% RH, Storage Humidity0 ~ 95% RH Operating Altitude2000m, Maximum Power Consumption17.6 W,Power Input100 - 240 VAC, CPU Speed400MHz, DRAM Size256MB, Flash Memory Size32MB, Packet Buffer Size448K bits, FANFanless	35931.00	Netgear	DIGISOL	DIGISOL	DLINK	DLINK	DLINK	DLINK
120	24CE33	Mobile 4G Router with Lan Out	Max 1Gbps download speeds, and 150Mbps upload speeds ,LTE CAT 16, 4-band CA and 4x4 MIMO, Up to 4X Carrier Aggregation, LTE/4G bands:1, 2, 3, 4, 5, 7, 12, 14, 29, 30, 66 , IPv6 Support ,WiFi 802.11 b/g/n 2.4GHz, 12dBm output power , WiFi 802.11 a/n/ac 5GHz, 12dBm output power (Maximum EIRP 17dBm) , battery -5040mAh battery , External Ports - Ethernet port , • USB-C port, Dual TS-9 external 3G/4G antenna connectors	8053.50	Netgear	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified

121	24CE34	WIFI Router for Small office Setup	AC2000 WiFi—300+1733Mbps† speeds ,MU-MIMO—Go faster by simultaneously streaming to multiple devices,Simultaneous dual band WiFi—2.4 & 5GHz , WiFi transmitters/receivers (Tx/Rx) - 2x2 (2.4GHz) + 4x4 (5GHz), Memory: 128MB NAND flash and 128MB DDR3 RAM , Advanced Quality of Service (QoS) • IPv6 support (Internet Protocol Version 6) , 4 port gigabit Ports ,1 Wan port	6195.00	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
122	24CE35	WIFI 6 MESH SYSTEM - (1+ 2) - 1 Router + 2 Mesh Satellite	Simultaneous Dual-band WiFi - Radio 1: IEEE® 802.11b/g/n/ax 2.4GHz— 1024-QAM support - Radio 2: IEEE® 802.11a/n/ac/ax 5GHz— 1024-QAM support Physical Specifications • Dimensions: 5.7 x 7.0 x 2.4 in each • Router weight: 1.46 lb • Satellite weight: 1.17 lb each Software Features • Orbi Mobile App • MU-MIMO capable for simultaneous data streaming • Implicit & Explicit Beamforming for 2.4GHz & 5GHz bands • Processor - Router & Satellite - Powerful quad-core 1.8GHz processor • Memory – Router - 512MB NAND flash and 512MB RAM • Antenna – Router & Satellite (each) – Two (2) high-performance internal antennas with high-power amplifiers , - Ports Router: Three (3) 10/100/1000Mbps Gigabit Ethernet LAN ports - One (1) 1Gbps Gigabit Ethernet WAN port • Ports – Satellite (each) - Two (2) 10/100/1000Mbps Gigabit Ethernet LAN ports	8053.50	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
123	24CE36	Additional Satellite for Mesh SYSTEM	Simultaneous dual-band WiFi - Radio 1: IEEE® 802.11b/g/n/ax 2.4GHz— 1024-QAM support - Radio 2: IEEE® 802.11a/n/ac/ax 5GHz— 1024-QAM support • MU-MIMO capable for simultaneous data streaming • Implicit & Explicit Beamforming for 2.4GHz & 5GHz bands • Processor - Powerful quad-core 1.8GHz processor • Antenna - Two (2) high-performance internal antennas with high-power amplifiers • Ports - Two (2) 10/100/1000Mbps Gigabit Ethernet LAN ports	3717.00	Netgear	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
124	24CE37	HP MSR 954 Router	• Integrated GbE WAN and LAN, fiber (SFP) /• Integrated 4G LTE, 3G as well as IEEE 802.11b/g/n WLAN in one box /• Embedded encryption, stateful firewall, NAT, ADVPN security features /Unified Comware v7 OS, Comware v7 OS zero-touch solution, and single-pane-of-glass management	286868.15	Not Qualified	Not Qualified	Not Qualified	HP MSR 954	HP MSR 954	HP MSR 954	Not Qualified
			Architecture								
			The switch should have at least 24 nos. 1G/10G SFP+ ports 6 x 40G QSFP+ or 2 x 100G QSFP28 uplink ports.								
			The Switch should support,1 RJ-45 serial console port,1 RJ-45 out-of-band management port and 1 USB 2.0 port								
			The switch should support dual power supply and 4 fan tray slots								
			The switch Shall support 1000 Base-SX, LX, 1000 Base-T, 10Gbase-SR,LR, 40G SR4, 40G LR4, 100G SR4 and 100G LR4								
			The switch should have 1GB flash, 4GB SDRAM								
			The Switch should have 12 MB packet buffer size								
			All the ports in the Switch should be 1U 19" Rack-Mountable								
			At least 960Gbps switching capacity								
			The switch shall have switching throughput upto 714 million pps								
			MAC Address table size of 208K entries								
			Switch should at least support 16K IPv4 and 8K IPv6 routing entries								
			Quality of Service (QoS)								
			The Switch should support Strict Priority (SP), WRR, WDRR, WFQ, SP+WRR, SP+WDRR, SP+WFQ, Configurable Buffer, Time range, Queue Shaping, CAR with 8kbps granularity								
			The Switch should support packet filtering at L2 (Layer 2) through L4 (Layer 4); flow classification based on source MAC address, destination MAC address, source IP (IPv4/IPv6) address, destination IP (IPv4/IPv6) address, port, protocol, and VLAN.								
			Resiliency, High availability, Datacenter and Optimization features								
			The Switch should have the capability to extend the control plane across multiple active switches making it a virtual switching fabric, enabling interconnected switches to perform as single Layer-2 switch and Layer-3 Switch . The Fabric should be managed by a single IP Address.								
			The connected servers or switches should be attached using standard LACP for automatic load balancing and high availability.								
			The Switch should have Advanced modular operating system								
			The Switch should have Internal redundant and hot-pluggable power supplies and dual fan trays								
			The Switch should support Jumbo frames sizes of up to 10,000 bytes on Gigabit Ethernet and 10-Gigabit ports								
			The Switch should support VXLAN Layer 2 and Layer 3 gateway support for up to 2k tunnels								

#	Code	Category	Requirement		Col1	Col2	Col3	Col4	Col5	Col6	Col7
			The Switch should support OVSDB QoS and OVSDB ACL								
			The Switch should support IEEE 802.1w Rapid Convergence Spanning Tree Protocol								
			The Switch should support IEEE 802.1s Multiple Spanning Tree								
			The Switch should support Virtual Router Redundancy Protocol (VRRP)								
			The Switch should support Bidirectional Forwarding Detection (BFD) to enables link connectivity monitoring and reduces network convergence time for RIP, OSPF, BGP, IS-IS, VRRP and switch virtulisation technology								
			The Switch should support Device Link Detection Protocol (DLDP)								
			The Switch should support Graceful restart for OSPF, BGP, and IS-IS								
			The Switch should able to shut off unused ports and utilizes variable-speed fans, reducing energy costs								
			The switch shall support data center convergence and resiliency with SPB, ISSU, DCB, FCoE, FCoE, EEE 802.1Qbb Priority Flow Control (PFC), DCBX, IEEE 802.1Qaz Enhanced Transmission Selection (ETS)								
			Layer 2 switching								
			The Switch should support MAC-based VLAN								
			The Switch should support Address Resolution Protocol (ARP) and supports static, dynamic, and reverse ARP and ARP proxy								
			The Switch should support IEEE 802.3x Flow Control								
			The Switch should support Ethernet Link Aggregation								
			The Switch should support IEEE 802.3ad Link Aggregation of up to 128 groups of 32 ports and support for LACP, LACP Local Forwarding First, and LACP Short-time provides a fast, resilient environment that is ideal for the data center								
			The Switch should support support STP (IEEE 802.1D), Rapid STP (RSTP, IEEE 802.1w), and Multiple STP (MSTP, IEEE 802.1s)								
			The Switch should support for 4,096 VLANs based on port, MAC address, IPv4 subnet, protocol, and guest VLAN; supports VLAN mapping								
			The Switch should support for IGMP Snooping, Fast-Leave, and Group-Policy; IPv6 IGMP Snooping provides Layer 2 optimization of multicast traffic								
			The Switch should support DHCP support at Layer 2								
			Layer 3 services								
			The Switch should support Address Resolution Protocol (ARP)								
			The Switch should determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network								
125	24CE38	L3 Distribution Network	The Switch should support simplifies the management of large IP networks and supports client and server; DHCP Relay enables DHCP operation across subnets		Not Qualified	Not Qualified	Not Qualified	DLINK	DLINK	DLINK	DLINK
			The Switch should support for Connectivity Fault Management (IEEE 802.1AG) and Ethernet in the First Mile (IEEE 802.3AH) provides additional monitoring that can be used for fast fault detection and recovery	619376.10							
			Layer 3 routing								
			The Switch should support Virtual Router Redundancy Protocol (VRRP) and VRRP Extended								
			The Switch should support Policy-based routing								
			The Switch should support Equal-Cost Multipath (ECMP)								
			The Switch should support static routes, RIP and RIPv2, OSPF, BGP, and Intermediate system to intermediate system (IS-IS)								
			The Switch should support Static IPv6 routing								
			The Switch should support separate stacks for IPv4 and IPv6 to ease the transition from an IPv4-only network to an IPv6-only network design								
			The Switch should allows IPv6 packets to traverse IPv4-only networks by encapsulating the IPv6 packet into a standard IPv4 packet; supports manually configured, 6to4, and Intra-Site Automatic Tunnel Addressing Protocol (ISATAP) tunnels; is an important element for the transition from IPv4 to IPv6								
			The Switch should allow custom filters for increased performance and security; supports ACLs, IP prefix, AS paths, community lists, and aggregate policies								
			The Switch should Multicast Routing PIM-DM, PIM-SM, PIM-SSM for IPv4 and IPv6								
			The Switch should static routing, RIPng, OSPFv3, BGP4 for IPv6, and IS-ISv6, Multiprotocol BGP (MBGP)								
			Management								
			The Switch should allow users to copy switch files to and from a USB flash drive								

The Switch should support Multiple configuration files and stores easily to the flash image	
The Switch should support SNMPv1, v2c, and v3	
The Switch should support Remote configuration and management	
The Switch should support sFlow (RFC 3176)	
The Switch should support Telnet, CLI, SSHv2	
The Switch should support Dual flash images	
The Switch should mirror ingress/egress ACL-selected traffic from a switch port or VLAN to a local or remote switch port anywhere on the network	
The Switch should support ingress and egress port monitoringand traceroute and ping	
The Switch should support multiple configuration files to be stored to a flash image	
The Switch should support Remote configuration and management	
The Switch should support ISSU and hot patching	
The Switch should support automatic configuration via DHCP autoconfiguration	
The Switch should support NTP, SNTP	
Security	
The Switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number	
The Switch should support RADIUS/TACACS+	
The Switch should support Secure shell encrypt all transmitted data for secure remote CLI access over IP networks	
The Switch should support IEEE 802.1X and RADIUS network logins	
The Switch should support allow access only to specified MAC addresses, which can be learned or specified by the administrator	
The Switch should support LLDP-MED (Media Endpoint Discovery)	
Other Feature	
The switch should support QoS Policy Propagation via BGP(QPPB) to allow propagation of QoS policy and classification by the sending party based on access lists, community lists, and autonomous system paths in the Border Gateway Protocol (BGP) thus helping to classify based on destination instead of source address.	
The switch should support Ethernet OAM (802.3ah) and Connectivity Fault Detection (CFD) (802.1ag)	
The switch should support Distributed Resilient Network Interconnect (DRNI) protocol to Provide a resilient interconnect using multiple links among one or more nodes in a network	
The switch should support ERPS to provide fast protection and recovery switching for Ethernet traffic	
Environmental feature and Certification	
The switch shall support operating temperature of 0°C to 45°C	
The switch shall support relative humidity 10% to 90% non-condensing	
The switch shall support ROHS Compliance	
Safety: UL 60950-1; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60950-1; AS/NZS 60950-1; CNS 14336-1 Emissions: VCCI Class A; EN 55032 Class A; ICES-003 Class A; AS/NZS CISPR 32 Class A; EN 61000-3-2; EN 61000-3-3; FCC (CFR 47, Part 15) Class A; CISPR 32 Class A; CNS 13438; KN32; TCVN 7189; Anatel Resolution 442; ETSI EN 300-386	

	CF	CATEGORY CF-Components of CCTV									
126	24CF1	8 /16 Channel SMPS	12V 10 AMP SMPS / 12V 20 AMP SMPS	1573.53	CP Plus/HIKVISION/DLINK/MATRIX	GOOD QUALITY	EQUIVELENT	DLINK	DLINK	ERD	DLINK
127	24CF2	VGA Cable	VGA Cable of 20 Mts	631.89	BRANDED	GOOD QUALITY	EQUIVELENT	ISI	stack fine	LS LAPSTER	ISI
128	24CF3	GI Pole with concreate	3" 20Ft. G.I. Pole	6814.50	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	ISI	Market Compatible	JINDAL	ISI
129	24CF4	PVC Casing caping with installation per Meter	25 mm Casing Caping	123.90	ISI MARK PRODUCT	GOOD QUALITY	EQUIVELENT	ISI	Labour Charges	PVC	ISI
130	24CF5	PVC Casing caping with installation per Meter	32 mm Casing Caping	142.49	ISI MARK PRODUCT	GOOD QUALITY	EQUIVELENT	ISI	Labour Charges	PVC	ISI
131	24CF6	HDMI cable Dual ended 10 mtr	HDMI Cable of 10 Mts	1053.15	BRANDED	GOOD QUALITY	EQUIVELENT	ISI	stack fine	FINGERS	ISI
132	24CF7	HDMI cable Dual ended 20 mtr	HDMI Cable of 20 Mts	1177.05	BRANDED	GOOD QUALITY	EQUIVELENT	ISI	stack fine	FINGERS	ISI

133	24CF8	CAT 6A UTP Cable (Per Mtrs) with laying, termination & installation	23 AWG solid bare copper, CAT-6A UTP Cable,Meets EIA/TIA 568-C.2 Category 6A specifications, CM Rated, Worst Case Cable Skew: 45 nsec/100 meters MAX. @ 250MHz maximum, Characteristic Impendence: 100±15%, 1-500 MHz, Insulation polyethylene, Conductor resistance 6.65ohm / 100m maximum, Solid Cable should be compliance to RoHS or FR PVC. Sheath Fire resistant OR LSZH, PAIRS Color code: Blue / White-Blue, Orange / White-Orange Green / White-Green, Brown / White – Brown, ELECTRICAL CHARACTERISTICS Input Impedance (250500 MHz): 100 +/- 25 Ohms Mutual Voltage 300 Volts AC or DC Capacitance: 5.6 nF/100 mtr.	74.34	MOLEX/BELDEN/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
134	24CF9	SOLID CABLE CAT 6, 4 PAIR,UTP-per Mtrs with laying, termination & installation	4 pair, 100Ω, Unshielded twisted pair, Scanned till 500 MHz , Category 6gv specifications UL Listed Solid 4 pair 23 AWG Cat 6 Cable, Voltage: 30V, Dielectric Strength: 1000V AC, Current Rating: 1.5 Amps	49.56	MOLEX/BELDEN/DLINK/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
135	24CF10	Cat 6 SFTP , shileded cable for protection against power cable , other cable interference	SOLID Cable CaT 6 SFTP ,4 PAIR ,23 AWG, FRPVC jacket sheath,INSULATION Material -High density polyethylene (HDPE), installtion and operating temperature --20°C to +70°C, Braiding -Tinned copper conductor , Aluminuium foil Layer etc	80.54	MOLEX/BELDEN/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
136	24CF11	CAT 6 DOUBLE JACKET FOR OUTDOOR OPEN WIRING	SOLID Cable CaT 6 outdoor Double Shealth ,4 PAIR ,23 AWG, FRPVC jacket sheath,INSULATION Material -High density polyethylene (HDPE), installtion and operating temperature --20°C to +70°C, Seperator Material-, inner /outer jacket-FRPVC / Polyethylene etc	60.71	MOLEX/BELDEN/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
137	24CF12	Armoured CAT 6A UTP Cable (Per Mtrs) with laying, termination & installation	23 AWG solid bare copper, CAT-6A UTP Cable,Meets EIA/TIA 568-C.2 Category 6A specifications, CM Rated, Worst Case Cable Skew: 45 nsec/100 meters MAX. @ 250MHz maximum, Characteristic Impendence: 100±15%, 1-500 MHz, Insulation polyethylene, Conductor resistance 6.65ohm / 100m maximum, Solid Cable should be compliance to RoHS or FR PVC. Sheath Fire resistant OR LSZH, PAIRS Color code: Blue / White-Blue, Orange / White-Orange Green / White-Green, Brown / White – Brown, ELECTRICAL CHARACTERISTICS Input Impedance (250500 MHz): 100 +/- 25 Ohms Mutual Voltage 300 Volts AC or DC Capacitance: 5.6 nF/100 mtr.	117.71	MOLEX/BELDEN/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
138	24CF13	Modular Switch Plate: 2M Module	• Should be as per ISI certifications	92.93	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
139	24CF14	Modular Switch Plate: 4M Module	• Should be as per ISI certifications	111.51	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
140	24CF15	Modular Switch Plate: 6M Module	• Should be as per ISI certifications	175.94	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
141	24CF16	Modular Switch Plate: 8M Module	• Should be as per ISI certifications	175.94	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
142	24CF17	Modular Switch Plate: 12M Module	• Should be as per ISI certifications	247.80	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
143	24CF18	Modular Surface Box: 2M Module	• Should be as per ISI certifications	59.47	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
144	24CF19	Modular Surface Box: 4M Module	• Should be as per ISI certifications	80.54	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
145	24CF20	Modular Surface Box: 6M Module	• Should be as per ISI certifications	105.32	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
146	24CF21	Modular Surface Box: 8M Module	• Should be as per ISI certifications	148.68	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
147	24CF22	Modular Surface Box: 12M Module	• Should be as per ISI certifications	183.37	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
148	24CF23	Modular Electrical switches: 6 Amp	• Should be as per ISI certifications	61.95	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
149	24CF24	Modular Electrical Socket: 6 Amp	• Should be as per ISI certifications	136.29	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
150	24CF25	Modular Electrical switches: combination of 6 x 16 Amp	• Should be as per ISI certifications	138.77	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
151	24CF26	Modular Electrical socket: combination of 6 x 16 Amp	• Should be as per ISI certifications	223.02	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
152	24CF27	Electrical copper wire: 2.5, sq mm with insatallation per metre	• Should be as per ISI certifications • Should have CE certifications	68.15	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	HAVELLS	Vinay /G.M.
153	24CF28	Electrical copper wire: 4, sq mm with insatallation per metre	• Should be as per ISI certifications • Should have CE certifications	97.88	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	HAVELLS	Vinay /G.M.
154	24CF29	3 core 6 sq.mm. Electric Cable with installation per mtr.	• Should be as per ISI certifications	401.44	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	HAVELLS	Vinay /G.M.

#	Code	Item	Specification	Rate							
155	24CF30	2 Core Speaker Wire with installation per mtr.	• Should be as per ISI certifications	64.43	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
156	24CF31	4 Way MCB Box with installation	Metal Box for installation of input and putput MCBs,• Should be as per ISI certifications	309.75	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
157	24CF32	8 Way MCB Box with installation	Metal Box for installation of input and putput MCBs,• Should be as per ISI certifications	774.38	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
158	24CF33	MCB- 63 Amp	• Should be as per ISI certifications	1102.71	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
159	24CF34	MCB- 40 Amp	• Should be as per ISI certifications	223.02	ISI MARK PRODUCT	ISI MARK PRODUCT	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	LEGRAND	Vinay /G.M.
160	24CF35	Indoor Camera Installation Box	Camera back box suitable for installation of Dome / Bullet Cameras with mic.4x4 Inches	148.68	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	ELCO	Vinay /G.M.
161	24CF36	Outdoor Installation Box	Size approx. 2Ft*2Ft*1Ft	594.72	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	ELCO	Vinay /G.M.
162	24CF37	Camera Stand Outdoor Metal	Camera stand suitable for installation of outddor Bullet and PTZ Cameras to be mounted on Pole.	1858.50	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	Vinay /G.M.	Vinay / ANCHOR	BECTRO	Vinay /G.M.
163	24CF38	SFP Trancereceiver sm	1000Base-LX SFP Transceiver LC Type (20Kms) SM	3163.17	SYROTECH/DIGISOL DG-SA1133-20	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
164	24CF39	SFP Trancereceiver sm 10G	10GE SFP+ LR Transceiver,LC type,SM	10531.50	AXM762 /DIGISOL DG-SA2143	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
165	24CF40	SFP Trancereceiver sm 10G Copper	10G 10000BASE-T SFP TRANSCEIVER RJ-45 TYPE,SM	8703.98	AXM765 /DIGISOL DG-SA2230T	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
166	24CF41	UTP to fiber transceiver 1 Gbps with ST	Up to 1.25Gb/s bi-directional data links, "Smart" Digital Diagnostics Functions, Extended Operating Temperature Range (0°C to +50°C), Extended Power Supply Voltage (Operate at 3.3V and 5V),. Hot-Pluggable,. Fully metallic enclosure for low EML. Low power dissipation	6764.94	SYROTECH/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
167	24CF42	UTP to fiber transceiver 1 Gbps with SC	Up to 1.25Gb/s bi-directional data links, "Smart" Digital Diagnostics Functions , Extended Operating Temperature Range (0°C to +50°C), Extended Power Supply Voltage (Operate at 3.3V and 5V), Hot-Pluggable, Fully metallic enclosure for low EML. Low power dissipation	6554.31	DG-MC6123S-PR /DG-MC6123S-PT	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
168	24CF43	1000 Base SX- transceivers with LC connector mm	Hot-Pluggable, Low power dissipation	3248.66	NETGEAR AGM731F/DG-SA1030	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
169	24CF44	1000 Base SX- transceivers with LC connector sm	Hot-Pluggable, Low power dissipation	3163.17	NETGEARAGM732F/DG-SA1133-20	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
170	24CF45	1000 Base TX transceivers for copper	Hot-Pluggable, Low power dissipation	3332.91	AGM734/ DG-SA1230T	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
171	24CF46	10/100/1000 ethernet LAN extenders on Copper pair	1 port RJ45 – 10/100/1000 Base-T - Shielded, Auto-MDIX enables proper operation with either straight-through or crossover cabling, Distance up to 100 meters (328 feet) as per IEEE 802.3,	8673.00	SYROTECH/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
172	24CF47	10/100/1000 ethernet LAN extenders on optical fiber (SX)	1 # Optical Fiber (1000 Mbps) with SC interface, 1 # RJ-45 (10/100/1000Mbps),Up to 120Km distance on single-mode fiber	6009.15	SYROTECH/DLINK/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
173	24CF48	Patch Cord,SM(OS2), Duplex LC-SC,PC Type 3M	Patch Cord, Single mode, G.652D OS1/OS2 corning, 2.00mm / 3.00mm Duplex LC-SC,PC Type, Insertion Loss: ≤ 0.2dB, Max. 0.3dB, Length: 3 Meter	1053.15	SYROTECH/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	NETLINK	DLINK
174	24CF49	Fibre Drawer,LIU, Loaded,24SM,SC or LC Sx adapter	LIU 24 Port Rack Mount - 1U, Single Mode, Loaded with SC Type adaptors, with Splice Tray & Cable Spool provision inside	8053.50	SYROTECH/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	NETLINK	DLINK
175	24CF50	Fibre Joint Box	Outdoor Joint Box	1486.80	SYROTECH/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	NETLINK	DLINK
176	24CF51	Pigtail,SM, Simplex SC Type 1M	Patch Cord, Single mode, G.652D OS1/OS2 corning, 0.9mm Simplex SC Type, Insertion Loss: ≤ 0.2dB, Max. 0.3dB, Length: 1 Meter	167.27	SYROTECH/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	NETLINK	DLINK
177	24CF52	Earthing	Earthing with G.I earth pipe 2.5 Mtr. Long and 40 mm dia with salt and charcoal/coke as required with digging of hard/soft soil and refilling	12390.00	JOB	JOB	JOB	JOB	JOB	GI	JOB
178	24CF53	HDPE Pipe Per Mtr	High Density Pipe of 40 MM or higher (HD Pipe)	80.54	ISI MARK	ISI MARK	EQUIVELENT	ISI MARK	ISI Mrk	MANGALAM	ISI Mrk
179	24CF54	Gi/Steel Pipe per Mtr	Gi/Steel Piping of 10 MM or higher for road crossing	136.29	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	ISI Mrk	JINDAL	ISI Mrk
180	24CF55	POLES FOR CAMERA MOUNTING 1	6 Mtrs height + 4 Mrts ARM , with Concreate base and bolt	6814.50	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	Market Stndrd	RIPSAT	Market Stndrd
181	24CF56	POLES FOR CAMERA MOUNTING 2	6 Mtr height + 2 mtr ARM ,with Concreate base and bolt	11770.50	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	Market Stndrd	RIPSAT	Market Stndrd
182	24CF57	POLES FOR CAMERA MOUNTING 3	4 mtr height + 1 mtr arm , Galvanised for antitrust with Concreate base and bolt	22302.00	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	Market Stndrd	RIPSAT	Market Stndrd
183	24CF58	Supplying, Installation, Testing & Commissioning of : Solar Power Solution for Camera	Solar Panel with Mount bracket + Battery + Solar Inverter with 20 hrs backup system + IP67 Enclosure for battery & invertor with pole mount bracket	72151.93	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	GOOD QUALITY	UTL	GOOD QUALITY

184	24CF59	SECURITY RADAR FOR AREA PROTECTION	Perfomance :(Max. Number of Targets- 32,Detection Distance -Human: 450.0 m (1476.38 ft) Vehicle: 600.0 m (1968.50 ft), Detection Angle-Horizontal: 90° Vertical: 13°,Max. Detection Speed-80 km/h, continuous trajectory, Distance Accuracy-1.8 km/h, continuous trajectory, Angle Accuracy-± 1°, Detection Target Type-Human and vehicle), Ethernet-(RJ-45 (10Base-T/100Base-TX), Interoperability-ONVIF Profile S&G, CGI, Storage-NAS; FTP; micro SD card (256 G),) Environment :(Operating Temperature--40°C to +65°C (−40°F to +149°F), Protection grade-IP67/IK10), Ports:(Alarm Input-1 channel (support 5V DC potential and 5mA current),Alarm Output-5 channels (wet contact; support max 12V DC potential and max 300mA current), Alarm Linkage-Snapshots, radar-PTZ linkage, SD card record, alarm triggering output, electronic map displaying, and email sending, Alarm Event-Radar alarm, no SD card, insufficient SD card storage, SD card error, network disconnection, IP conflict, full disk, and illegal access, SD Card-yes,Indicator Light- Running status: Red/Green Power: Green)Function : (Radar+PTZ Smart Tracking-Supported on web manager, Target Filtering-Human and vehicle filtering, Positioning-GPS, Glonass,Map Encoding-yes, Security-Authorized username and password, MAC address binding, HTTPS encryption, IEEE 802.1x, and network access control, Region Setting-Alarm area, pre-warning area, and shield area)	371700.00	PRAMA /CPPLUS	CPPLUS	EQUIVELENT	CPPLUS	EQUIVELENT	HIKVISION	EQUIVELENT
185	24CF60	Radar Pole Bracket	Bracket for Radar fixing on poles	9292.50	GOOD QUALITY	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	Market Stndrd	BECTRO	Market Stndrd
186	24CF61	128 GB Micro SD Memory Card	Storage: 128GB, Durability:Shockproof, Temperature Extremes, Waterproof, X-Ray Proof	1486.80	SANDISK/HP/EQUIVALENT	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	Market Stndrd	SANDISK	Market Stndrd
187	24CF62	1KVA Voltage Stabilizers	Working Range: Input 170v – 270v , Output : 200v – 240v ,Low/High Voltage Cut off .	3407.25	VGURAD/LIV GUARD/EQUIVALENT	GOOD QUALITY	EQUIVELENT	GOOD QUALITY	Vinay / ANCHOR	VGUARD	Market Stndrd
188	24CF63	1 Meter Dual Ended Mounting UTP Cat 6 patch Cord	NA	130.10	DLINK/DIGISOL	GOOD QUALITY	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
189	24CF64	3 Meter (s) Dual Ended Mounting UTP Cat 6 patch Cord	NA	192.05	DIGISOL	GOOD QUALITY	EQUIVELENT	DLINK	DLINK	DLINK	DLINK
190	24CF65	HDMI extender through LAN	CElRoHS/FC certified, Full HD- 1080p@60 Hz., Transmission distance 120 mtrs	3097.50	CADYCE/EQUIVALENT	GOOD QUALITY	EQUIVELENT	ISI	Market Standard	TERABYTE	ISI
191	24CF66	IP65 PVC Dvr/Poe junction box	33.02 x 11 x 12.7 cm,Height-5 Inches,Width-11 Centimeters with 3 Socket PDU	929.25	BRANDED	GOOD QUALITY	EQUIVELENT	ISI	Market Standard	SINTEX	ISI
192	24CF67	Single Mode (OS2) Unitube, Armoured 6 Core, HDPE	6 core 9/125µm Single Mode, ITU-T REC G.652D OS1 / OS2, ECCS Armoured Unitube with Gel compound - HDPE outer Sheath / Jacket, Supported wavelength: 1310/1550; Attenuation: 1310 ≤0.38 nm / 1550 ≤0.25 nm.	43.37	MOLEX/BELDEN/DIGISOL	DIGISOL	EQUIVELENT	DLINK	DLINK	FINOLEX	DLINK
193	24CF68	POWER FIBER	1.System must be a complete "rack to device" solution capable of powering and communicating with small cells, Wi-Fi hotspots, HD cameras, and variety of devices requiring optical communications and DC power in one system.2.The hybrid cable shall allow for "standalone" use for delivering of power and fiber communications for applications where both power and fiber communications.3.When used along with the PoE extension device, the powered fiber optic cable shall supply optical fiber communications and PoE+ power for network access and other low voltage DC devices.Following Standards shall be complied:RoHS (2002/95/EC) ,REACH SVHC, 53 6/20/11 ,TIA-568-C ,Deca-BDE free ,Power limited circuit cable UL 13 (CL2R-OF AND CL3R-OF),Communication cable per UL 444 (CMR-OF),UL 1666 standard for test for flame propagation - Edition 5 - Revision date 2012/06/27 ,IEC 60332-1-1, -2, 60332-3-24 Cat. C, 61034 60745-2 ,ITU.T K21,GR-1089 ,IEC 60793-2-50 type B.1.3 and B.6.A&B ,ITU-T G.657.A2/B2 optical fiber, backwards compatible with G.652.D,PoE (IEEE 802.3af-2003) and PoE+ (IEEE 802.3at-2009),Must comply with Canadian code ICES-003	557.55	MOLEX/ BELDEN	Not Qualified	Not Qualified	Dlink/Commscope	DLINK	UNIFLEX	Dlink/Commscope
194	24CF69	Hybrid Fiber / Copper Cable	Conductor Size-12 AWG,Optical Fiber-2 or 4 Cores,Fiber type-Single Mode,Cable length-2KM,Environmental Characteristics-Storage Temperature: -40° to 70°C Operating Temperature: -40° to 70°C Installation Temperature: -10° to 60°C, Tensile Load Short Term: 440 N, Long Term: 132 N ,Single mode Reduce Bend Radius Fiber; 0.35/0.25 (1310/1550 nm),EIA/FOTP-25C -4.4 N-m, EIA/FOTP-41A -2200 N-m	309.75	MOLEX/ BELDEN	Not Qualified	Not Qualified	Dlink/Commscope	DLINK	UNIFLEX	Dlink/Commscope

#	Code	Item	Specification	Price	Col1	Col2	Col3	Col4	Col5	Col6	Col7
195	24CF70	PoE Extension Device	Provides termination for hybrid cable input and automatically corrects voltage drop over distance,Must use outdoor rated patch cord,Extender shall have three (3) levels of electrical protection 1) Primary - GDT component rated to 40kA surge protection 2) Secondary - MOV components rated to 4.5kA 3) Tertiary - TVS prevents the voltage from rising above 80-100VTermination block shall support a minimum of 200 re-terminations while maintaining a contact resistance of less than one (1) milliohm,Environmentally sealed closure rated to IP68,SFP module in the POE extender should match module in existing switch,Must be ascetically appealing for Wi-Fi access point deployment with the ability to be hidden inside the mounting brackets,Storage Temperature:-40° to 70°C,Operating Temperature:-40° to 65°C,Installation Temperature:-5° to 45°C	7681.80	GOOD QUALITY	Not Qualified	Not Qualified	Dlink	Market Standard	AXIS	Dlink
196	24CF71	Rackmount Power Distribution Unit	Must be compatible with GE Critical Power Express Class II shelf or Alpha Chassis part number 0300156-001 and its modules part number 0120028-001,Shall comply with NEC Class II and SELV,Each GE Modules shall accommodate eight (8) cable outputs; each output must be capable of powering a PoE+ (30W) device at a distance of 2.5 Km, each GE chassis shall contain up to four (4) modules total per power supply for a total of 32 cables per power supply,Each Alpha Modules shall accommodate four (4) cable outputs; each output must be capable of powering a PoE+ (30W) device at a distance of 2.5 Km, each Alpha chassis shall contain up to nine (9) modules total per power supply for a total of 36 cables per power supply,Capable of extending maximum distance to 1.5 Km for PoE+ (30W output) and 3 Km for PoE (15W output)	5451.60	GOOD QUALITY	Not Qualified	Not Qualified	Dlink/Commscope	Market Standard	NETRACK PDU	Dlink/Commscope
197	24CF72	Rackmount Cable and Fiber Management Panel	Must be rack-mounted style and provide separation and cable management for the power and optical fiber elements of the hybrid powered fiber cable,Shall contain a fiber splice tray,Must be equipped with LC or SC fiber connectors in front,Shall contain terminal block for front access connection to Power Supply Unit (PSU) and circuit breakers	2973.60	GOOD QUALITY	Not Qualified	Not Qualified	GOOD QUALITY	Market Standard	NETRACK	N.A.
198	24CF73	Creation of LAN Point	All the necessary equipments / items / materials required for creation of new LAN (I/O) point including all the termination / crimping etc.	557.55	JOB	JOB	JOB	GOOD QUALITY	Labour Charges	DLINK	N.A.
199	24CF74	6 Core armored cable –MM	Multimode 50 Micron OM3, Armored, loose-tube, CST armor, Gel Filled -cable type, 50 / 125, Laser Grade, 250 micron primary coated buffers -fiber type, 6/12/24/48 core cable, BELLCORE GR 20 / IEC 794-1- Cable Construction, 3.5 dB / KM with @850nm and 1.5 dB / KM with @1300nm – Attenuation, 1500 MHz-KM with @850nm and 500 MHz-KM with @1300nm- Bandwidth, 2000m -10 / 100 Ethernet network support , 2000m -155 Mbps ATM network support, 600m -1000 Base SX network support, 2000m-1000 Base Lx network support, 100 m-10G network support, 1200N- Tensile rating network support, 3000N Maximum Crush resistance network support, -40 Degree C to +70 Degree C Operating Temperature, Corrugated Steel tape Armor, Black -Color, High density polyethylene, anti - termite, anti - rodent suitable for direct burial application- Outer jacket LSZH or HDPE, Gel filled Loose Tube-Water Blocking Aramid yarn Strength member, minimum installation bend radius-200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, , RoHS compliant	80.54	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
200	24CF75	12 Core armored cable –MM	Multimode 50 Micron OM3, Armored, loose-tube, CST armor, Gel Filled -cable type, 50 / 125, Laser Grade, 250 micron primary coated buffers -fiber type, 6/12/24/48 core cable, BELLCORE GR 20 / IEC 794-1- Cable Construction, 3.5 dB / KM with @850nm and 1.5 dB / KM with @1300nm – Attenuation, 1500 MHz-KM with @850nm and 500 MHz-KM with @1300nm- Bandwidth, 2000m -10 / 100 Ethernet network support , 2000m -155 Mbps ATM network support, 600m -1000 Base SX network support, 2000m-1000 Base Lx network support, 100 m-10G network support, 1200N- Tensile rating network support, 3000N Maximum Crush resistance network support, -40 Degree C to +70 Degree C Operating Temperature, Corrugated Steel tape Armor, Black -Color, High density polyethylene, anti - termite, anti - rodent suitable for direct burial application- Outer jacket LSZH or HDPE, Gel filled Loose Tube-Water Blocking Aramid yarn Strength member, minimum installation bend radius-200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, , RoHS compliant	105.32	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK

201	24CF76	24 Core armored cable –MM	Multimode 50 Micron OM3, Armored, loose-tube, CST armor, Gel Filled -cable type, 50 / 125, Laser Grade, 250 micron primary coated buffers -fiber type, 6/12/24/48 core cable, BELLCORE GR 20 / IEC 794-1- Cable Construction, 3.5 dB / KM with @850nm and 1.5 dB / KM with @1300nm – Attenuation, 1500 MHz-KM with @850nm and 500 MHz-KM with @1300nm- Bandwidth, 2000m -10 / 100 Ethernet network support , 2000m -155 Mbps ATM network support, 600m -1000 Base SX network support, 2000m-1000 Base Lx network support, 100 m-10G network support, 1200N- Tensile rating network support, 3000N Maximum Crush resistance network support, -40 Degree C to +70 Degree C Operating Temperature, Corrugated Steel tape Armor, Black -Color, High density polyethylene, anti - termite, anti - rodent suitable for direct burial application- Outer jacket LSZH or HDPE, Gel filled Loose Tube-Water Blocking Aramid yarn Strength member, minimum installation bend radius- 200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, , RoHS compliant	117.71	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
202	24CF77	48 Core armored cable –MM	Multimode 50 Micron OM3, Armored, loose-tube, CST armor, Gel Filled -cable type, 50 / 125, Laser Grade, 250 micron primary coated buffers -fiber type, 6/12/24/48 core cable, BELLCORE GR 20 / IEC 794-1- Cable Construction, 3.5 dB / KM with @850nm and 1.5 dB / KM with @1300nm – Attenuation, 1500 MHz-KM with @850nm and 500 MHz-KM with @1300nm- Bandwidth, 2000m -10 / 100 Ethernet network support , 2000m -155 Mbps ATM network support, 600m -1000 Base SX network support, 2000m-1000 Base Lx network support, 100 m-10G network support, 1200N- Tensile rating network support, 3000N Maximum Crush resistance network support, -40 Degree C to +70 Degree C Operating Temperature, Corrugated Steel tape Armor, Black -Color, High density polyethylene, anti - termite, anti - rodent suitable for direct burial application- Outer jacket LSZH or HDPE, Gel filled Loose Tube-Water Blocking Aramid yarn Strength member, minimum installation bend radius- 200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, , RoHS compliant	179.66	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
203	24CF78	6vCore outdoor armored cable –SM	9/ 125, ITU-T 652.D Compliance Cable Construction BELLCORE GR 20 / IEC 794-1, Attenuation @1310nm < = 0.34 dB/Km @1550nm < = 0.22 dB/Km Coating / Cladding <= 9 microns non-circularity, Zero Dispersion Slope <= 0.086 ps / sqnm-km Max (chromatic) <5.3 ps/nm-km @12701340 nm <3.5 ps/nm-km @1285-1330 nm <185ps/nm-km @1550 nm, Tensile rating 1250N, Maximum resistance Crush 3000N, Operating Temperature -20 Degree C to +70 Degree C, Armor Corrugated Steel tape Armor, Outer jacket LSZH or HDPE. Aramid yarn as a strength member Gel filled Loose Tube, minimum installation bend radius- 200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, RoHS compliant.	49.56	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
204	24CF79	12 Core outdoor armored cable –SM	9/ 125, ITU-T 652.D Compliance Cable Construction BELLCORE GR 20 / IEC 794-1, Attenuation @1310nm < = 0.34 dB/Km @1550nm < = 0.22 dB/Km Coating / Cladding <= 9 microns non-circularity, Zero Dispersion Slope <= 0.086 ps / sqnm-km Max (chromatic) <5.3 ps/nm-km @12701340 nm <3.5 ps/nm-km @1285-1330 nm <185ps/nm-km @1550 nm, Tensile rating 1250N, Maximum resistance Crush 3000N, Operating Temperature -20 Degree C to +70 Degree C, Armor Corrugated Steel tape Armor, Outer jacket LSZH or HDPE. Aramid yarn as a strength member Gel filled Loose Tube, minimum installation bend radius- 200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, RoHS compliant.	80.54	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
205	24CF80	24 Core outdoor armored cable –SM	9/ 125, ITU-T 652.D Compliance Cable Construction BELLCORE GR 20 / IEC 794-1, Attenuation @1310nm < = 0.34 dB/Km @1550nm < = 0.22 dB/Km Coating / Cladding <= 9 microns non-circularity, Zero Dispersion Slope <= 0.086 ps / sqnm-km Max (chromatic) <5.3 ps/nm-km @12701340 nm <3.5 ps/nm-km @1285-1330 nm <185ps/nm-km @1550 nm, Tensile rating 1250N, Maximum resistance Crush 3000N, Operating Temperature -20 Degree C to +70 Degree C, Armor Corrugated Steel tape Armor, Outer jacket LSZH or HDPE. Aramid yarn as a strength member Gel filled Loose Tube, minimum installation bend radius- 200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, RoHS compliant.	92.93	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK

Sr	Code	Item	Specification	Price							
206	24CF81	48 Core outdoor armored cable –SM	9/ 125, ITU-T 652.D Compliance Cable Construction BELLCORE GR 20 / IEC 794-1, Attenuation @1310nm < = 0.34 dB/Km @1550nm < = 0.22 dB/Km Coating / Cladding <= 9 microns non-circularity, Zero Dispersion Slope <= 0.086 ps / sqnm-km Max (chromatic) <5.3 ps/nm-km @12701340 nm <3.5 ps/nm-km @1285-1330 nm <185ps/nm-km @1550 nm, Tensile rating 1250N, Maximum resistance Crush 3000N, Operating Temperature -20 Degree C to +70 Degree C, Armor Corrugated Steel tape Armor, Outer jacket LSZH or HDPE. Aramid yarn as a strength member Gel filled Loose Tube, minimum installation bend radius- 200mm, Fiber Core should be Silica Glass or equivalent- Fiber Core, RoHS compliant.	154.88	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
207	24CF82	4 Core Fibre Cable unarmoured-SM	4 Core Fiber Optic Cable, Unarmoured, 1 Km ; Diameter. 6 mm ; Mode Type. Single Mode ; Operating Temperature. -40 deg C to +70 deg C.	37.17	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
208	24CF83	6 Core Fibre Cable unarmoured-SM	6 Core Optic Fiber Cable, unarmoured, 5 Km ; Diameter. 9mm to 9.5 mm +/- 0.3 mm ; Mode Type. Single Mode ; ; Operating Temperature. -40 deg C to +70 deg C.	49.56	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
209	24CF84	12 Core Fibre Cable unarmoured-SM	12 Core Optic Fiber Cable, Mode Type. Single ; Overall Diameter. 7mm ; Size. 400-500 mtrs ; Minimum Bend Radius. 25D.	61.95	DIGISOL/MOLEX/BELDEN	DIGISOL	HFCL/EQUIVELENT	DLINK	DLINK	STERLITE	DLINK
210	24CF85	4 Port OLT	Exchange capacity 104Gbps , Forwarding rate 77.376Mpps , memory : 2GB, storage : 8GB , 4*1000MBase-XSFP/4*10 GE SFP+ / Comply with ITU-TG.984/G.988 standard ,20KM Physical differential distance, 60KM transmission logical distance , 1:128 Max splitting ratio , Standard OMCI management function ,Open to any brand of ONT ONU batch software upgrade / Support 4K VLAN Support Vlan based on port, MAC and protocol Support dual Tag VLAN, port-based static QinQ and fiexible QinQ , Support STP/RSTP/MSTP , Support ERPS Ethernet ring network protection protocol Support Loopback-detection port loopback detection ,	203366.98	DIGISOL DG-GO4304-2E2SFPP	DIGISOL	DIGISOL	OPTILINK/OP-GOLT 94404	Market Standard	SYROTECH	OPTILINK/OP-GOLT 94404
211	24CF86	8 Port OLT	Exchange capacity 104Gbps , Forwarding rate 77.376Mpps , memory : 2GB, storage : 8GB , 8*GPON Port, 4*10/100/1000MBase-T,4*1000MBase-XSFP/4*10 GE SFP+ / Comply with ITU-TG.984/G.988 standard ,20KM Physical differential distance, 60KM transmission logical distance , 1:128 Max splitting ratio , Standard OMCI management function ,Open to any brand of ONT ONU batch software upgrade / Support 4K VLAN Support Vlan based on port, MAC and protocol Support dual Tag VLAN, port-based static QinQ and fiexible QinQ , Support STP/RSTP/MSTP , Support ERPS Ethernet ring network protection protocol Support Loopback-detection port loopback detection ,	279392.02	DIGISOL DG-GO4308-6E2SFPP	DIGISOL	DIGISOL	OPTILINK/OP-GOLT 94408	Market Standard	SYROTECH	OPTILINK/OP-GOLT 94408
212	24CF87	16 Port OLT	Exchange capacity 104Gbps , Forwarding rate 77.376Mpps , memory : 2GB, storage : 8GB , 8*GPON Port, 16*10/100/1000MBase-T,4*1000MBase-XSFP/4*10 GE SFP+ / Comply with ITU-TG.984/G.988 standard ,20KM Physical differential distance, 60KM transmission logical distance , 1:128 Max splitting ratio , Standard OMCI management function ,Open to any brand of ONT ONU batch software upgrade / Support 4K VLAN Support Vlan based on port, MAC and protocol Support dual Tag VLAN, port-based static QinQ and fiexible QinQ , Support STP/RSTP/MSTP , Support ERPS Ethernet ring network protection protocol Support Loopback-detection port loopback detection ,	467554.00	SYROTECH /EQUIVALENT	EQUIVALENT	EQUIVALENT	OPTILINK/OP-GOLT 94816	Market Standard	SYROTECH	OPTILINK/OP-GOLT 94816
213	24CF88	1G/EPON 1GE ONU	Memory 32MB , 1 G/EPON port(EPON PX20+ and GPON Class B+) Wavelength:Tx1310nm,Rx 1490nm , 1 x 10/100/1000Mbps auto adaptive Ethernet interfaces.10/100/1000M Full/Half, RJ45 ,	2539.95	DIGISOL DG-GR6010	DIGISOL	DIGISOL	OPTILINK/OP-XONT 71000	Market Standard	SYROTECH	OPTILINK/OP-XONT 71000
214	24CF89	Fiber Splitter without connector 1	PLC Splitter 1 x 2 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	415.07	Compatible	Compatible	MR/EQUIVELENT	OP-1X2 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X2 PLC SPLITTER W/o CONN.
215	24CF90	Fiber Splitter without connector 2	PLC Splitter 1 x 4 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	415.07	Compatible	Compatible	MR/EQUIVELENT	OP-1X4 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X4 PLC SPLITTER W/o CONN.
216	24CF91	Fiber Splitter without connector 3	PLC Splitter 1 x 8 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	415.07	Compatible	Compatible	MR/EQUIVELENT	OP-1X8 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X8 PLC SPLITTER W/o CONN.
217	24CF92	Fiber Splitter without connector 4	PLC Splitter 1 x 16 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	415.07	Compatible	Compatible	MR/EQUIVELENT	OP-1X16 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X16 PLC SPLITTER W/o CONN.
218	24CF93	Fiber Splitter with connector 1	PLC Splitter 1 x 2 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	1536.36	Compatible	Compatible	MR/EQUIVELENT	OP-1X2 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X2 PLC SPLITTER WITH SC/UP CONN.
219	24CF94	Fiber Splitter with connector 2	PLC Splitter 1 x 4 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	1920.45	Compatible	Compatible	MR/EQUIVELENT	OP-1X4 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X4 PLC SPLITTER WITH SC/UP CONN.
220	24CF95	Fiber Splitter with connector 3	PLC Splitter 1 x 8 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	1920.45	Compatible	Compatible	MR/EQUIVELENT	OP-1X8 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X8 PLC SPLITTER WITH SC/UP CONN.

No	Code	Item	Description	Price							
221	24CF96	Fiber Splitter with connector 4	PLC Splitter 1 x 16 mini type ,1 mtr ,0.9mm ,G.657A Fiber Single Mode	1920.45	Compatible	Compatible	MR/EQUIVELENT	OP-1X16 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X16 PLC SPLITTER WITH SC/UP CONN.
222	24CF97	Fiber Splitter cassette Type 1	PLC Splitter 1 X 4 with (Cassette Type) SC/UPC Connector	3456.81	Compatible	Compatible	MR/EQUIVELENT	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/UPC	Market Standard	NETLINK	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/UPC
223	24CF98	Fiber Splitter cassette Type 2	PLC Splitter 1 X 4 with (Cassette Type) SC/APC Connector	3456.81	Compatible	Compatible	MR/EQUIVELENT	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/APC	Market Standard	NETLINK	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/APC
224	24CF99	Fiber Splitter cassette Type 3	PLC Splitter 1 X 8 with (Cassette Type) SC/UPC Connector	3456.81	Compatible	Compatible	MR/EQUIVELENT	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/UPC	Market Standard	NETLINK	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/UPC
225	24CF100	Fiber Splitter cassette Type 4	PLC Splitter 1 X 8 with (Cassette Type) SC/APC Connector	3456.81	Compatible	Compatible	MR/EQUIVELENT	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/APC	Market Standard	NETLINK	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/APC
226	24CF101	Fiber Splitter cassette Type 5	PLC Splitter 1 X 16 with (Cassette Type) SC/UPC Connector	4014.36	Compatible	Compatible	MR/EQUIVELENT	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/UPC	Market Standard	NETLINK	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/UPC
227	24CF102	Fiber Splitter cassette Type 6	PLC Splitter 1 X 16 with (Cassette Type) SC/APC Connector	4014.36	Compatible	Compatible	MR/EQUIVELENT	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/APC	Market Standard	NETLINK	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/APC
228	24CF103	Optical Distribution Frame 1	12PORTS ODF WITH SC/APC-LOADED	6442.80	Compatible	Compatible	MR/EQUIVELENT	ODF-12PORT SC/APC	Market Standard	NETLINK	ODF-12PORT SC/APC
229	24CF104	Optical Distribution Frame 2	24PORTS ODF WITH SC/APC-LOADED	11894.40	Compatible	Compatible	MR/EQUIVELENT	ODF-24PORT SC/APC	Market Standard	NETLINK	ODF-24PORT SC/APC
230	24CF105	Optical Distribution Frame 3	48PORTS ODF WITH SC/APC LOADED	18832.80	Compatible	Compatible	MR/EQUIVELENT	ODF-48PORT SC/APC	Market Standard	NETLINK	ODF-48PORT SC/APC
231	24CF106	Optical Distribution Frame 4	12PORTS ODF WITH SC/PC-LOADED	23472.86	Compatible	Compatible	MR/EQUIVELENT	ODF-12PORT SC/UPC	Market Standard	NETLINK	ODF-12PORT SC/UPC
232	24CF107	Optical Distribution Frame 5	24PORTS ODF WITH SC/PC-LOADED	25275.60	Compatible	Compatible	MR/EQUIVELENT	ODF-24PORT SC/UPC	Market Standard	NETLINK	ODF-24PORT SC/UPC
233	24CF108	Optical Distribution Frame 6	48PORTS ODF WITH SC/PC LOADED	34196.40	Compatible	Compatible	MR/EQUIVELENT	ODF-48PORT SC/UPC	Market Standard	NETLINK	ODF-48PORT SC/UPC
234	24CF109	Route Marker	Cement Concerete route marker 1 mtr hight with installation.	991.20	Compatible	Compatible	EQUIVELENT	N.A.	Market Standard	NETLINK	N.A.
235	24CF110	RCC Manhole	RCC Manhole chamber with concrete manhole cover.It shall be provided at every joint location to keep the Optical Fibre Cable joint well protected and also to house extra length of cable which may be required in the event of faults at a later date. The Joint chamber shall be of pre-cast RCC type as per construction.Size 1mtr x 1mtr,cover thickness 75mm ,capacity 700-800 Liter.	9483.31	JOB	Compatible	EQUIVELENT	N.A.	Labour Charges	JINDAL CONCRETE UDYOG	N.A.
236	24CF111	Fiber Splice Box	Fiber Splice Box 24 core Fiber optic Joint box Cable Outdoor Horizontal/Round Waterproof Optical Fiber Splice Box closure	1486.80	COMPATIBLE	Compatible	EQUIVELENT	DLINK	DLINK	NETLINK	D-LINK/NJE-FSD004-24F-25
237	24CF112	Outdoor enclosure/Rack	Floor mount outdoor Rack/Enclosure IP66 with provision of single phase power meter box.Size :H-1800mm , W-1200MM , D-800mm with cable manager ,cooling fans,32Amp double pole MCB, Power strip with 5 nos 6 Amp Sockets, 3 trays,Half feet tube light,earthing with installation (minimum 1ft concrete slab above ground and 2ft under ground for four legs.	6442.80	NETRACK	NETRACK	EQUIVELENT	DLINK	Market Stndrd	EMERSON	Dlink
238	24CF113	Single Phase power meter	Single Phase commercial power meter with necessary material for outdoor enclosure considering 36 months average rent plus utilisation	78057.00	ANCHOR /EQUIVALENT	Compatible	EQUIVELENT	ISI	Market Compatible	Not Qualified	Not Qualified
239	24CF114	155Mbps BIDI SFP Transceiver for OLT	155Mbps BIDI SFP Transceiver for OLT	4559.52	SYROTECH	Compatible	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
240	24CF115	20KM Dual Fiber SFP for OLT	Single LC receptacle optical interface compliant Hot-pluggable SFP footprint, 1310nm FP laser transmitter, RoHS compliant and Lead Free, Up to 20 km on 9/125um SMF, Metal enclosure for lower EMI, Single +3.3V power supply, Low power dissipation <600mW, Commercial operating temperature range: 0°C to +70°C	5621.34	SYROTECH	Compatible	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
241	24CF116	20KM Gigabit Single Core SFP for OLT	Up to 1.25Gb/s data links, Single LC connector, Hot-pluggable SFP footprint,1310nm FP laser transmitter, 1550nm InGaAs PIN receiver, RoHS compliant and Lead Free, Up to 20km on 9/125um SMF, Metal enclosure for lower EMI, Single +3.3V power supply, Low power dissipation <800mW, Commercial and industrial operating temperature optional, SFP MSA SFF-8074i Compliant	5989.33	SYROTECH	Compatible	EQUIVELENT	DLINK	DLINK	SYROTECH	DLINK
242	24CF117	PLC Splitter without connector 1	PLC Splitters Without Connectors 1:2	3717.00	COMPATIBLE	Compatible	EQUIVELENT	OP-1X2 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X2 PLC SPLITTER W/o CONN.

243	24CF118	PLC Splitter without connector 2	PLC Splitters Without Connectors 1:4	3717.00	COMPATIBLE	Compatible	EQUIVELENT	OP-1X4 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X4 PLC SPLITTER W/o CONN.
244	24CF119	PLC Splitter without connector 3	PLC Splitters Without Connectors1:8	3717.00	COMPATIBLE	Compatible	EQUIVELENT	OP-1X8 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X8 PLC SPLITTER W/o CONN.
245	24CF120	PLC Splitter without connector 4	PLC Splitters Without Connectors1:16	3717.00	COMPATIBLE	Compatible	EQUIVELENT	OP-1X16 PLC SPLITTER W/o CONN.	Market Standard	NETLINK	OP-1X16 PLC SPLITTER W/o CONN.
246	24CF121	PLC Splitter with connector 1	PLC Splitters With Connectors 1:2	7929.60	COMPATIBLE	Compatible	EQUIVELENT	OP-1X2 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X2 PLC SPLITTER WITH SC/UP CONN.
247	24CF122	PLC Splitter with connector 2	PLC Splitters With Connectors 1:4	7929.60	COMPATIBLE	Compatible	EQUIVELENT	OP-1X4 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X4 PLC SPLITTER WITH SC/UP CONN.
248	24CF123	PLC Splitter with connector 3	PLC Splitters With Connectors 1:8	7929.60	COMPATIBLE	Compatible	EQUIVELENT	OP-1X8 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X8 PLC SPLITTER WITH SC/UP CONN.
249	24CF124	PLC Splitter with connector 4	PLC Splitters With Connectors 1:16	4956.00	COMPATIBLE	Compatible	EQUIVELENT	OP-1X16 PLC SPLITTER WITH SC/UP CONN.	Market Standard	NETLINK	OP-1X16 PLC SPLITTER WITH SC/UP CONN.
250	24CF125	Fiber Splitter cassette Type 1	PLC Splitter 1 X 4 with (Cassette Type) SC/UPC Connector	6442.80	COMPATIBLE	Compatible	EQUIVELENT	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/UPC	Market Standard	NETLINK	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/UPC
251	24CF126	Fiber Splitter cassette Type 2	PLC Splitter 1 X 4 with (Cassette Type) SC/APC Connector	10531.50	COMPATIBLE	Compatible	EQUIVELENT	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/APC	Market Standard	NETLINK	OP-1X4 PLC SPLITTER CASSETTE TYPE SC/APC
252	24CF127	Fiber Splitter cassette Type 3	PLC Splitter 1 X 8 with (Cassette Type) SC/UPC Connector	10531.50	COMPATIBLE	Compatible	EQUIVELENT	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/UPC	Market Standard	NETLINK	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/UPC
253	24CF128	Fiber Splitter cassette Type 4	PLC Splitter 1 X 8 with (Cassette Type) SC/APC Connector	10531.50	COMPATIBLE	Compatible	EQUIVELENT	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/APC	Market Standard	NETLINK	OP-1X8 PLC SPLITTER CASSETTE TYPE SC/APC
254	24CF129	Fiber Splitter cassette Type 5	PLC Splitter 1 X 16 with (Cassette Type) SC/UPC Connector	18252.95	COMPATIBLE	Compatible	EQUIVELENT	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/UPC	Market Standard	NETLINK	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/UPC
255	24CF130	Fiber Splitter cassette Type 6	PLC Splitter 1 X 16 with (Cassette Type) SC/APC Connector	18252.95	COMPATIBLE	Compatible	EQUIVELENT	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/APC	Market Standard	NETLINK	OP-1X16 PLC SPLITTER CASSETTE TYPE SC/APC
256	24CF131	Optical Distribution Frame 1	12PORTS ODF WITH SC/APC-LOADED	14868.00	COMPATIBLE	Compatible	EQUIVELENT	ODF-12PORT SC/APC	Market Standard	NETLINK	ODF-12PORT SC/APC
257	24CF132	Optical Distribution Frame 2	24PORTS ODF WITH SC/APC-LOADED	17676.81	COMPATIBLE	Compatible	EQUIVELENT	ODF-24PORT SC/APC	Market Standard	NETLINK	ODF-24PORT SC/APC
258	24CF133	Optical Distribution Frame 3	48PORTS ODF WITH SC/APC LOADED	17676.81	COMPATIBLE	Compatible	EQUIVELENT	ODF-48PORT SC/APC	Market Standard	NETLINK	ODF-48PORT SC/APC
259	24CF134	Optical Distribution Frame 4	12PORTS ODF WITH SC/PC-LOADED	17676.81	COMPATIBLE	Compatible	EQUIVELENT	ODF-12PORT SC/UPC	Market Standard	NETLINK	ODF-12PORT SC/UPC
260	24CF135	Optical Distribution Frame 5	24PORTS ODF WITH SC/PC-LOADED	29541.48	COMPATIBLE	Compatible	EQUIVELENT	ODF-24PORT SC/UPC	Market Standard	NETLINK	ODF-24PORT SC/UPC
261	24CF136	Optical Distribution Frame 6	48PORTS ODF WITH SC/PC LOADED	33258.48	COMPATIBLE	Compatible	EQUIVELENT	ODF-48PORT SC/UPC	Market Standard	NETLINK	ODF-48PORT SC/UPC
			CATEGORY CG-Display Units & UPS								
262	24CG1	LED Monitor 20"	20" Screen size, 1920 X 1080 panel resolution, with USB, HDMI & Ethernet ports, with mouse and keyboard	6504.75	SAMSUNG/LG	CPPLUS	EQUIVELENT	Samsung /Viewsonic	Zebronics / CP Plus / Secureeye	LG	LG
263	24CG2	Display Units 32" LED TV	32" Screen size, 3840 x 2160 (UHD) panel resolution, with USB, HDMI & Ethernet ports RJ45, Wifi,Built in speaker (10 + 10 Watts RMS),LAN Output.	20443.50	SAMSUNG/LG	Samsung / VU	EQUIVELENT	Samsung /Viewsonic	Zebronics / CP Plus / Secureeye	LG	LG
264	24CG3	Display Units 40"/43" LED TV	40" / 43" Screen size, 3840 x 2160 (UHD) panel resolution, with USB, HDMI & Ethernet ports RJ45, Wifi,Built in speaker (10 + 10 Watts RMS), LAN Output.	44326.46	SAMSUNG/LG	Samsung/VU	EQUIVELENT	Samsung /Viewsonic	Zebronics / CP Plus / Secureeye	LG	LG
265	24CG4	1KVA UPS with 30 minutes backup	Battery : Sealed Maintenance Free (SMF) batteries of 12V/14AH (7AHX2), Input Voltage : 160V to 280V AC, Single Phase, Input Frequency : 45 Hz to 55 Hz, Overload protection and Alarm	9044.70	FUJI/VERTIV	VERTIV	VERTIV	Uniline	Liebert ITON CX 1000 VA	APC	VERTIV
266	24CG5	3KVA Online UPS with Built in Battery	Battery : 112V / 9AH X 6 Nos., Input voltage : 220V ±20% AC, 50 Hz Output Voltage : 220VAC single phase, , Input Frequency : 45 to 55Hz Overload protection and Alarm	60899.33	FUJI/VERTIV	VERTIV	VERTIV	Uniline	Liebert GXT MT+ CX 3 kVA SB UPS	APC	VERTIV
	CH		CATEGORY CH-Softaware for Voilations and Analytics								

#	Code	Item	Description	Price							
267	24CH1	VMS for CCTV	software based video management system (VMS), ,Features include: user rights management,device management, alarm management, TV wall management , 2-way audio talk, access control, video talk, entrance management, alarm controller and other advanced features, onvif Support , Doesnot include any Server for loading VMS and Client camera License (Hardware Requirment :Mid Level Server + Windows license-(not included)	396480.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	CPPLUS/ GLOBUS	EQUIVELENT	DLINK	Vehant - Sterieye	CP PLUS	DLINK
268	24CH2	Camera License for VMS support	Licesing for Camera for connectivty and management on VMS	2230.20	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	CPPLUS/ GLOBUS	EQUIVELENT	DLINK	Vehant - Sterieye	CP PLUS	DLINK
269	24CH3	General Surveilance Centre	High Flexibility and Scability · Up to 20 slave servers can be managed per master server · Supports up to 5-level cascade · Supports unlimited accounts management, 200 online users and 100 roles · Supports 500 IP devices and 2000 channels · Supports 100 Onvif, devices · Supports 200 IP Access Controls or Alarm Controllers and 500 channels, Powerful Center Storage: · Up to 200TB per server · Backup record to center storage · Up to 15 hard disk and ISCSI expand storage · Supports HDD group modes, different HDD group can be assigned to different camera · Support Raid 0/1/5/6/10	1053150.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	DLINK	Vehant - Sterieye	Not Qualified	DLINK
270	24CH4	Software For Automatic Number Plate Recognition	•Detects & Identify Unique License Plate of Vehicles • Recognizes Character on the License Plates through Optical Character Recognition. •Stores the Complete Details License Plates along with an Image in the Database. •Automatic network based searching of the cameras with ONVIF support •Web based GUI to be accessible from any system •ANPR for Speeds up to 120/hr or higher. • More than 95% Accuracy during day time and 85% during night time for al HCV, LCV, cars and two wheelers etc. types and classes of vehicles	136290.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	i2V	Vehiscan- ANPR	Not Qualified	i2V
271	24CH5	Software For Red Light Violation Detection System	• Intuitive & Single Graphical User Interface (GUI) for all ITMS Analytics Offering • Video based Red Light Monitoring in Real-time, with Evidence Monitoring o Infraction/Violation also in Real-time • Stores Video & Multiple Images of Violating Vehicles in Different Lanes with Unique ID, Location/Direction, Device ID, Lane ID or Lane No. And Evidence Image & ANPR Image along with Date & Time Stamp in the encrypted form in Database •Real-time Alerts on Red Light Violation •Automatic E-Challan Generation for Violators (Red Light Violation Detection)	92925.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	i2V	Vehant - TrafficMon- RLVD	Not Qualified	i2V
272	24CH6	Software For Video based Speed Violation Detection System	• Intuitive & Single Graphical User Interface (GUI) for all ITMS Analytics Offering •Speed Violations & ANPR for Speeds up to 120/hr or higher • Stores Video & Multiple Images of Violating Vehicles in Different Lanes with Unique ID, Location/Direction, Device ID, Lane ID or Lane No. And Evidence Image & ANPR Image along with Date & Time Stamp in the encrypted form in Database •Real-time Alerts on Speed Violation	92925.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	i2V	Vehant - TrafficMon- SVD	Not Qualified	i2V
273	24CH7	Software For No Helmet Detection	• Intuitive & Single Graphical User Interface (GUI) for all ITMS Analytics Offering • Options for Smart Searching & Exporting the Vehicles data for No Helme Detection Violations only. • Stores Video & Multiple Images of Violating Vehicles in Different Lanes with Unique ID, Location/Direction, Device ID, Lane ID or Lane No. And Evidence Image & ANPR Image along with Date & Time Stamp in the encrypted form in Database • No Helmet Detection in Real-time, with Evidence Monitoring of Infraction/Violation of No Helmet Riding in Real-time Automatic E-Challan Generation for Violators (No Helmet Detection)	92925.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	i2V	Vehant - TrafficMon- Traffic Analytics	Not Qualified	i2V
274	24CH8	Traffic Command and Control Center Software	Web based Central Monitoring Server Software for requirement for upto 100 lanes or higher, of ANPR / RLVD / No Helmet / Triple Riding, Violation statisticss and graphs,TrafficMon-Integrated e-Challan Software - for upto 2 user licenses only	681450.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	i2V	Vehant CMS & TrafficMon- Echallan application	Not Qualified	i2V

275	24CH9	Software for AI Based attendance through IP camera	1) Instant Identification & Recognition, 2) Should give SMS and Email Notification to User who recognised, 3) Customized Attendance Reports, 4)Open API Platform for 3rd Party Integration, 5) Attendance through Artificial Intelligence, 6) Counting the faces occurred in the multiple cameras, 7) Detect any matches with faces on the "watch list"database and provide alerts to control room., 8) Innovative AI techniques to identify faces at most angles in large scale, 9)Customizable MIS reports for alerts, movements, area-access, attendance, historical comparisons, etc. 10) Scalable Solution - Adding more cameras or features just requires adding required compute hardware, 11)Can work on any IP cameras of 2MP and above and attendance from multiple defined cameras, Should used with Existing IP camera, 12) Should Possible for both on-prem and on-cloud deployment, 13) Possibility of Integration with Existing and Future Systems - The solutions can be replaced / upgraded at any point and should be able to communicate with external agencies / systems as and when required though open API integration.	619500.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	i2V	vehant AI	Not Qualified	i2V
276	24CH10	RLVD Software Module	Red Light Violation Detection Software Module,RLVD Software Module-Artificial Intelligence based technology for reliable veicle detection, Vision based detection technique. No ground sensor and digging of roads, GPU enabled hardware for processing, Data to command centre for ANPR/LPR decoding & issuing of ticket ,	117705.00	CPPLUS/HIKVISION/MATRIX/EQUIVALENT	Not Qualified	EQUIVELENT	i2V	Vehat - Sterieye	Not Qualified	i2V
	CI		CATEGORY CI-Installation								
277	24CI1	Installation for CCTV(Per Camera)	Camera Termination/Junction Box: Install, test and commission of the camera. The work shall include for all labour of camera fixing, camera stand fixing,DVR/NVR installation,Switch Insatallation, Patch Pannel Installation,Rack Installation Cable crimping with RJ 45 connector . All works related to End terminations and commissioning the camera on the network.	1300.95	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
278	24CI2	Installation with GI pole(Per Camera)	Gi Pole Fixing: The work shall include for all labour of Gi Pole fixing with cooncrete for installation of the camera.	6814.50	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
279	24CI3	Service Engineer	Service Engineer: Deployment of service engineer for Full time onsite service & support for networking/CCTV per month	7434.00	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
280	24CI4	Fibre Termination: Install, test and commission of Optical fibre termination. The work shall include for all labour of fibre spicing and end terminations with proper tools as per the company standards. (1 core=2 fusion for fibre spicing). It also includes fixing of LIU, transreceiver, Fibre Patch Cord LC-SC Type, Fibre SM Pig Tails LC, LC Adapters, Fiber to copper converter in rack.	Fibre Termination: Install, test and commission of Optical fibre termination. The work shall include for all labour of fibre spicing and end terminations with proper tools as per the company standards. (1 core=2 fusion for fibre spicing). It also includes fixing of LIU, transreceiver, Fibre Patch Cord LC-SC Type, Fibre SM Pig Tails LC, LC Adapters, Fiber to copper converter in rack.	1177.05	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
281	24CI5	Fibre Cable Laying (A): Laying & fixing of Outdoor Armored Fiber Cable without HD & GI Steel pipe.- Underground.	Fibre Cable Laying (A): Laying & fixing of Outdoor Armored Fiber Cable without HD & GI Steel pipe.- Underground.	49.56	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
282	24CI6	Fibre Cable Laying (B): Laying & fixing of Outdoor Armored Fiber Cable without HD & GI Steel pipe.- Arieal.	Fibre Cable Laying (B): Laying & fixing of Outdoor Armored Fiber Cable without HD & GI Steel pipe.- Arieal.	105.32	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
283	24CI7	Fibre Cable Laying (C): Fixing & Laying of Outdoor Armored fiber Cable in Gi/steel Piping of 10 m.m. when passing through tar/concrete road.	Fibre Cable Laying (C): Fixing & Laying of Outdoor Armored fiber Cable in Gi/steel Piping of 10 m.m. when passing through tar/concrete road.	74.34	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified

#	Code	Description	Description	Value							
284	24CI8	Fibre Cable Laying (D): Fixing of Outdoor Armored Fiber Cable in High density (HD) pipe of 30 MM when layed under soil.	Fibre Cable Laying (D): Fixing of Outdoor Armored Fiber Cable in High density (HD) pipe of 30 MM when layed under soil.	64.43	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
285	24CI9	Excavating & refilling of soil (Hard/Soft) without ROW/Permissions	Excavating & refilling of soil (Hard/Soft) without ROW/Permissions	1022.18	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
286	24CI10	Excavating & refilling of tar/concrete road without ROW/Permissions	Excavating & refilling of tar/concrete road without ROW/Permissions	1300.95	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
287	24CI11	Excavating & refilling of soil (Hard/Soft) with ROW/Permissions	Excavating & refilling of soil (Hard/Soft) with ROW/Permissions	1734.60	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
288	24CI12	Excavating & refilling of tar/concrete road with ROW/Permissions	Excavating & refilling of tar/concrete road with ROW/Permissions	1982.40	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
289	24CI13	Removal of Old cabling work including shifting/ rework, Bidder is required to remove the same & shift at new place or at ITG store. For shifting of material for more than 1 Km, ITG will pay actual transportation cost.	Removal of Old cabling work including shifting/ rework, Bidder is required to remove the same & shift at new place or at ITG store. For shifting of material for more than 1 Km, ITG will pay actual transportation cost.	2973.60	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
290	24CI14	Re-installation and commissioning works that includies shifted items (racks, patch chords, patch panels switches, any other items, etc)	Re-installation and commissioning works that includies shifted items (racks, patch chords, patch panels switches, any other items, etc)	4398.45	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
291	24CI15	Electrical Termination Point (A): Install, test and commission of 1 no of 16A socket and switch with moulded modular ploycarbonate surface box and moulded modular ploycarbonate switch plate including the termination of wires.	Electrical Termination Point (A): Install, test and commission of 1 no of 16A socket and switch with moulded modular ploycarbonate surface box and moulded modular ploycarbonate switch plate including the termination of wires.	309.75	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
292	24CI16	Electrical Termination Point (B): Install, test and commission of 3 nos of 6A socket & switch and 1 no 6 x 16A universal socket & 6 A switch with moulded modular ploycarbonate surface box and moulded modular ploycarbonate switch plate including the termination of wires.	Electrical Termination Point (B): Install, test and commission of 3 nos of 6A socket & switch and 1 no 6 x 16A universal socket & 6 A switch with moulded modular ploycarbonate surface box and moulded modular ploycarbonate switch plate including the termination of wires.	557.55	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
293	24CI17	Electrical Wire Laying (A): Fixing & Laying of electrical wiring in PVC casing from client node to UPS output.	Electrical Wire Laying (A): Fixing & Laying of electrical wiring in PVC casing from client node to UPS output.	43.37	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified

294	24CI18	Electrical Wire Laying (B): Fixing & Laying of electrical wiring in PVC casing from input/output MCB's to main line. The work also shall include the termination of MCB's.	Electrical Wire Laying (B): Fixing & Laying of electrical wiring in PVC casing from input/output MCB's to main line. The work also shall include the termination of MCB's.	61.95	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
	CJ		CATEGORY CJ-EPABX System								
295	24CJ1	IP EPABX 3trunk and 8 Extension	Hybrid / IP based EPABX system 3 Analog Trunk + 8 Hybrid Extension System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	33453.00	MATRIX	NEC /Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
296	24CJ2	IP EPABX 3trunk and 16 Extension	Hybrid / IP based EPABX system 3 Analog Trunk + 16 Hybrid Extension System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	35931.00	MATRIX	NEC /Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified

#	Code	Name	Description	Price							
297	24CJ3	IP EPABX 6trunk and 32 Extension	Hybrid / IP based EPABX system 6 Analog Trunk , 2 Digital Port , +32 Hybrid Extension System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	68145.00	MATRIX	NEC /Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
298	24CJ4	IP EPABX 8 trunk and 48 Extension	Hybrid / IP based EPABX system 8 Analog Trunk ,2 Digital Port + 48 Hybrid Extension + System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	117705.00	MATRIX	NEC	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
299	24CJ5	IP EPABX 8 trunk and 64 Extension	Hybrid / IP based EPABX system 8 Analog Trunk ,2 Digital Port+ 64 Hybrid Extension System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	142485.00	MATRIX	NEC	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified

300	24CJ6	IP EPABX 8trunk and 96 Extension	Hybrid / IP based EPABX system 8 Analog Trunk ,2 Digital Port+ 96 Hybrid Extension System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	179655.00	MATRIX	NEC /Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
301	24CJ7	Operator Console with Direct Station Selection Keys	24 keys Key Digital telephone Instrument with DSS 60 Keys Answering an incoming call, Callqueuing, Call waiting display, Automatic Call Distribution, Call Hold, Trunkoffering, Nightservice, Head phoneconnectivity	16726.50	MATRIX	NEC /syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
302	24CJ8	Digital Phone	24 keys Key Digital telephone Instrument Answering an incoming call, Callqueuing, Call waiting display, Automatic Call Distribution, Call Hold, Trunkoffering, Nightservice, Head phoneconnectivity	5947.20	MATRIX	NEC /syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MOTOROLA	Not Qualified
303	24CJ9	Analog Telephone	Electric Volume control , Time Flash, Redial Memory	1170.86	BEETEL/EQUIVALENT	PANASONIC	Not Qualified	Beetel or equivalent	Not Qualified	MOTOROLA	Not Qualified
304	24CJ10	Analog Caller ID Telephone	Slim Design, Speaker Phone , CID , 30 call log , 5 Redial memory , LCD	1982.40	BEETEL/EQUIVALENT	PANASONIC	Not Qualified	Beetel or equivalent	Not Qualified	MOTOROLA	Not Qualified
305	24CJ11	Distribution Box 20 pair	MDF Panel with KRONE connector housed in lockable	1858.50	ISI/EQUIVALENT	AE/KPC	Not Qualified	ISI	Not Qualified	INFOTEK	Not Qualified
306	24CJ12	Distribution Box 30 pair	MDF Panel with KRONE connector housed in lockable	3097.50	ISI/EQUIVALENT	AE/KPC	Not Qualified	ISI	Not Qualified	INFOTEK	Not Qualified
307	24CJ13	Distribution Box 50 pair	MDF Panel with KRONE connector housed in lockable	4336.50	ISI/EQUIVALENT	AE/KPC	Not Qualified	ISI	Not Qualified	INFOTEK	Not Qualified
308	24CJ14	Distribution Box 100 pair	MDF Panel with KRONE connector housed in lockable	6195.00	ISI/EQUIVALENT	AE/KPC	Not Qualified	ISI	Not Qualified	INFOTEK	Not Qualified
309	24CJ15	Distribution Box 200 pair	MDF Panel with KRONE connector housed in lockable	7434.00	ISI/EQUIVALENT	AE/KPC	Not Qualified	ISI	Not Qualified	INFOTEK	Not Qualified
310	24CJ16	Creation of Extension Point	All the necessary equipments / items / materials required for creation of new Extension (I/O) , RJ11 point including all the termination / crimping etc.	1239.00	JOB	JOB	Not Qualified	N.A.	Not Qualified	OTHER	Not Qualified
311	24CJ17	E1T1 PRI CARD	T1/E1 PRI CARD	22921.50	MATRIX	AE/KPC	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified

312	24CJ18	IP EPABX 3trunk, 8 Extension,8 SIP Trunk,50 IP Extension	Hybrid / IP based EPABX system 3 Analog Trunk + 8 Hybrid Extension+ 8 sip Trunk + 50 IP Extension System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	35311.50	MATRIX	NEC/Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
313	24CJ19	IP EPABX 3trunk and 8 Extension,8 SIP Trunk,100 IP Extension	Hybrid / IP based EPABX system 3 Analog Trunk + 8 Hybrid Extension+ 8 sip Trunk + 100 IP Extension System should support Following features Smart Relays Automatic Route Selection facility DID facility (Direct inward dialling) DOD facility (Direct outward dialling) DISA facility (Direct inward station access) DOSA facility (Direct outwards station access) Multi-Level Voice DISA facility Privacy of Call Facility for connecting recorded voice answering ASMDR/CDR, Programmable class of service for (STD/ISD/LOCAL) dialling as per need Caller ID information for both internal and external callers (over Analogue, ISDN PRI) Unique authorization codes for every user -Automatic call back, Call waiting, Music- on-hold facility, Call budgeting, Mix-mode dialling, Provision for remote logins Voice Response System (VRS), System Extension should support Following features Call forwarding, ConsultationHold, BrokersCall, Automatic call transfer, Conferencecall, Call pick up, Callrerouting, Auto call disconnection, Dynamic STD Lock, Paging on key phone, Backgroundmusic, Passwordcontrol, VirtualTelephony, HowlerTone, Callparking, Auto answer/Auto off, Emergency call facility, Missed/Dialled/Received Call Lists, Last Caller Call back, Password display suppression, Personal Identification Number,Hotline,Preset Conference Calls, Calling line identification(CLI),Remote Maintenance, TEC approval as per the latest TEC specifications	167884.50	MATRIX SETU VFX440+SETU VFX808+SPARK200	NEC/Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
314	24CJ20	IP trunk Licence per port	One trunk license is required for each SIP trunk from ISP.	9133.91	MATRIX PRASAR VOCODER4	NEC	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
315	24CJ21	IP Extension Licence per port	One IP license is required for each IP Phone Or Softphone.	805.35	MATRIX /EQUIVALENT	NEC	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
316	24CJ22	IP PHONE	• IP Desktop Telephone,2 Line Keys, 128 x 64 Pixels 3 Feature Keys, 4 Context Sensitive Keys, ,DHCP server IP addressing,Vlan 1EEE802.1Q	5947.20	FANVIL/EQUIVALENT	NEC/Alcatel /Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
317	24CJ23	IP PHONE Desktop Telephone	• IP Desktop Telephone,2 Line Keys,24 Keys with Navigation keys, 165 X 58 Pixels LCD Display,DHCP server IP addressing,Vlan 1EEE802.1Q	11460.75	FANVIL/EQUIVALENT	NEC/Alcatel/Syntel	Not Qualified	Matrix / Grandstream	Not Qualified	MATRIX	Not Qualified
318	24CJ24	Extension per port	Tracing,retermination,Dressing of Existing Distribution Box along with Reinstallation and Programming of Existing EPABX extension.	743.40	FANVIL/EQUIVALENT	NEC/Alcatel/Syntel	Not Qualified	Qualified	Not Qualified	MATRIX	Not Qualified
	CK	CATEGORY CK-AMC Cost									
319	24CJ1	AMC Cost @ 2nd Year on Total Project Cost(Mention only Percentage)		18.59	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
320	24CJ2	AMC Cost @2nd + 3rd Year on Total Project Cost(Mention only Percentage)		18.59	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified
321	24CJ3	AMC Cost @4th + 5th Year on Total Project Cost(Mention only Percentage)		18.59	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified	Qualified