PESHAWAR HIGH COURT BANNU BENCH,

BANNU.

TENDER DOCUMENT

FOR

SUPPLY OF HARE WARE, PLANT & MACHINERY

AND

I.T EQUIPMENT

Last date for Bid Submission: May, 28th, 2025 by 10:00 AM

Date of Bid Opening: May, 28th, 2025 by 10:30 AM

May 2025

Terms and Conditions

1. Procurement shall be governed under the Khyber Pakhtunkhwa Public Procurement Rules, 2014.

2. Sealed bids must reach the office of the undersigned on 28.05.2025 upto 10:00 AM. Bids shall be opened on the same day at 10:30 AM in the office of Assistant Registrar, Chairman Purchase Committee in presence of the representative of the bidders (who may choose to be present).

3. Single Stage, Two Envelopes method will be adopted for Bidding Process.

4. The bid shall comprise of a single package containing two separate envelopes. Each envelope shall contain separately the "Financial Proposal" and the "Technical Proposal".

5. The envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion.

6. The total quoted price must be inclusive of all other taxes or duties.

7. Each bidding firm will provide an undertaking that it is not involved in any case of litigation etc.

8. The bidders must submit earnest money2% of the bid value in the favor of Additional Registrar, Peshawar High Court, Bannu Bench, Bannu in the shape of CDR from any scheduled Bank otherwise tender will be rejected.

9. Incomplete Bid Forms or Bid Forms with overwriting will not be accepted.

10. The procuring agency may reject all bids at any time prior to the acceptance of a bid with cogent reason.

11. The successful bidder must supply the goods within 15 days from the issuance date of Purchase Order.

12. In case the successful bidder fails to supply the ordered goods within 15 days, his purchase order will supposed to be cancelled, earnest money will be confiscated and the order will be placed to next lowest bidder(s).

13. It will be the responsibility of the successful bidder to supply and fix all the goods within the stipulated time at the Peshawar High Court, Bannu Bench, Bannu. The Procuring Agency will not bear any type of transportation cost.

14. The goods must be new and refurbished goods or broken/damaged goods will not be accepted.

15. The successful bidders(s) shall provide one year warranty period and shall ensure backup support/service during warranty period at their own expenses.

16. The successful bidder will ensure the timely warranty claims if/when required by Procuring Agency.

17. Quantity may be increased or decreased subject to availability of funds.

18. Supply Order will be issued subject to availability of funds.

<p style="text-align: center;"><u>Special Conditions of Contract</u></p>

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract.

1. Definitions

The Purchaser is: Peshawar High Court, Bannu Bench, Bannu.

2. Inspection and Tests

i.   After delivery of goods at the Purchaser's premises, the Purchaser shall inspect the quantity, quality, specifications of goods.

ii.   The Committee will carry out detailed physical examination of stocks and can reject, any item if found not according to the approved technical specifications etc. Moreover, the Supplier will also be responsible to replace the same without any further charges.

3. Packing

All the items to be provided in proper company packing with brochures and CDs.

4. Transportation and delivery requirements:

i.   The bidder shall deliver the supplies at the destination in scratch-less condition with all the manufacturer supplied accessories.

ii.   The Supplier shall arrange such transportation of the Goods as is required to prevent their damage or deterioration during transit.

iii.   All costs associated with the transportation including loading/unloading and road taxes shall be borne by the Supplier.

5. Warranty:

The warranty period of the supplied goods shall be one year from date of delivery of the supplies at the purchaser's premises

6. Payments:

- Payment to the successful bidder/Supplier will be made subject to:
- Satisfactory delivery, inspection, testing and configuration of items.
- Upon submission of required documents.
- 100% payments will be made after successful testing and commission

FORM OF BID

SUPPLY OF I.T EQUIPMENT AND PLANT & MACHINERY

S.NO	NAME OF ITEM	Specification	Qty	Unit price (including tax)	Total Price
	Computer systems All in one	• Windows 11** • Up to 13th Gen Intel ® Core™ i7 processor[12] or <u>AMD Ryzen™ 7 processor</u>[13] • Up to 23.8" (60.5 cm) FHD[16] IPS three-sided micro-edge screen • Up to 32 GB DDR4 RAM • Up to AMD Radeon™ graphics or Intel® Iris® Xe[14] graphics • Up to a Full HD IPS touch option display[16] • Up to 1 TB[17] PCIe ® NVMe™ SSD storage, up to Wi-Fi 6[14] (2x2) and Bluetooth ® 5.3 combo[16] • Up to Full HD[16] IR camera with temporal noise reduction • Wireless Keyboard and Mouse OR any latest model	10		
	HDD & USB	HDD: Best/ latest quality weather proof/ shock proof from 2 TB to 8 TB Portable HDD: Best/ latest quality weather proof/ shock proof from 2 TB to 8 TB USB: Best Quality weather proof/ shock proof from 32 GB to 64 GB	05 05 30		
	Printers	• Black & White printer • Max Print Speed: Up to 35 plus ppm • Memory: 256 MB • Max Resolution: 1200 x 1200 dpi • Processor Speed: 1200 MHz	05		
	Heavy duty printers	• Black & White printer • Max Print Speed: Up to 42 plus ppm • Memory: 256 MB plus • Max Resolution: 1200 x 1200 dpi • Processor Speed: 1200 MHz	02		
	Network Switch	• Min 5 Ports Best Quality	04		
	Computer accessories, including Mouse, keyboards, SSD etc	• SSD: Min 256 GB for HP Core i5 7th General pc • RAM: Min 16 GB (DDR4) for HP Core i5 7th General pc • Mouse: Original Best Quality (HP or Dell) • Keyboard: Original Best Quality (HP or Dell) • WebCam Logitech C922 Pro or latest	05 05 10		

		• Mics HDTZ	10	
		• Sound Mixer 4 Channel	02	
		• HDMI Cable 10 m 4K	02	
		• HDMI Cable 15 m 4K	01	
		• Wifi USB lan card (wireless) dual band best quality	01	
			01	
			03	

	LED screen 24/07 55 inch, latest smart tv	**General Features**
		  • **Size**
		55"
		  • **CPU**
		Cortex A55*5 1.5GHz（normal）1.9GHz（DVFS）
		  • **GPU**
		Mali G57 MC1 800MHz
		  • **OS**
		Android S
		  • **RAM/ROM**
		2GBDDR4 +16GB Flash
		  • **UI Style**
		Google TV UI
		  • **Power Consumption**
		135W
		  • **Certification**
		Dolby Audio, Dolby Vision, Dolby Atmos,DTS-HD CTS (Google OffiCTS (Google Official Certification), Netflix
		  • **Wi-fi**
		Yes
		  • **Voice Control**
		Handsfree Voice Control
		Display
		  • **Display Type**
		DLED
		  • **Display Resolution**
		3840x2160
		  • **UHD Support**
		Yes
		  • **HDR**
		HDR10+ / Dolby Vision
		  • **HDR Support**
		Yes
		  • **High Color Gamut**
		93% DCI-P3 (typ.)
		  • **Brightness (cd/m2)**
			3	

| | | 320nit (typ.)
• **Contrast Ratio**
5000:1
• **Colors**
1.07G (8 bit + FRC)
• **Refresh Rate**
60Hz/120Hz DLG
• **Dynamic Contrast**
Yes
• **Backlight Adjustable**
Yes (0~100)
Audio
• **Speaker Type**
Integrated Speakers (Bottom Side)
• **Audio Power Output（THD=7%**
2x10W
• **Dolby Atmos**
Yes
• **DTS**
Yes
Connectivity
• **Internet Link**
2.4GHz/5GHz dual-band Wi-Fi 802.11 b/g/a/n/ac 2T2R
• **HDMI**
3
• **HDMI&HDCP Version**
HDMI1.4 & HDMI2.0&HDMI2.1, HDCP1.4 & HDCP2.2
• **Cable Port**
Yes
• **USB**
USB 3.0
• **A/V IN**
Yes
Warranty
• **TV Parts**
(Panel, Parts, Or home service, except breakage of panel and electric spark and burnt) | | | |
| | 27/07 LED screen

46 inches, latest smart tv | **General Features**
• **Size**
46"
• **CPU**
Cortex A55*5 1.5GHz（normal） 1.9GHz（DVFS）
• **GPU**
Mali G57 MC1 800MHz
• **OS**
Android S
• **RAM/ROM**
2GBDDR4 +16GB Flash
• **UI Style**
Google TV UI
• **Power Consumption**
135W
• **Certification**
Dolby Audio, Dolby Vision, Dolby Atmos,DTS-HD CTS (Google OffiCTS (Google Official Certification), Netflix
• **Wi-fi**
Yes
• **Voice Control**
Handsfree Voice Control
Display | 8 | | |

		• **Display Type** DLED • **Display Resolution** 3840x2160 • **UHD Support** Yes • **HDR** HDR10+ / Dolby Vision • **HDR Support** Yes • **High Color Gamut** 93% DCI-P3 (typ.) • **Brightness (cd/m2)** 320nit (typ.) • **Contrast Ratio** 5000:1 • **Colors** 1.07G (8 bit + FRC) • **Refresh Rate** 60Hz/120Hz DLG • **Dynamic Contrast** Yes • **Backlight Adjustable** Yes (0~100) **Audio** • **Speaker Type** Integrated Speakers (Bottom Side) • **Audio Power Output（THD=7%** 2x10W • **Dolby Atmos** Yes • **DTS** Yes **Connectivity** • **Internet Link** 2.4GHz/5GHz dual-band Wi-Fi 802.11 b/g/a/n/ac 2T2R • **HDMI** 3 • **HDMI&HDCP Version** HDMI1.4 & HDMI2.0&HDMI2.1, HDCP1.4 & HDCP2.2 • **Cable Port** Yes • **USB** USB 3.0 • **A/V IN** Yes **Warranty** • **TV Parts** (Panel, Parts, Or home service, except breakage of panel and electric spark and burnt)			
	Domestic Water filtration plants	The specifications for a modern water filtration plant, specifically those using Reverse Osmosis (RO), often include features like multi-stage filtration, a high-capacity storage tank, a high-pressure booster pump, and automatic shut-off. Key features include a 9-stage RO process with UF filter, 100 GPD capacity, a 5-gallon storage tank, and a heavy-duty booster pump. Many models also offer features like alkaline filters and mineral filters to improve water quality. Here's a more detailed breakdown of common specifications:	04		

| | | Filtration Stages: Most RO plants utilize a multi-stage filtration process, with common numbers being 7, 8, or 9 stages. These stages typically include:
• **Sediment Filter:** Removes larger particles like rust and sediment.
• **Activated Carbon Filter:** Removes chlorine, taste, and odor.
• **Reverse Osmosis Membrane:** Removes dissolved solids, heavy metals, and contaminants.
• **Post-Carbon Filter:** Enhances taste and reduces any remaining contaminants.
• **Alkaline Filter:** Increases water pH.
• **Mineral Filter:** Reintroduces beneficial minerals.
Capacity and Storage:
• **Daily Output:**
RO plants are designed to produce a certain amount of water per day, often up to 100 gallons.
• **Storage Tank:**
A storage tank holds the purified water, with capacities ranging from 4 to 6.5 gallons.
Pump and Pressure:
• **Booster Pump:**
A high-pressure booster pump enhances the water pressure required for the RO process.
• **Inlet Water Pressure:**
RO plants require a certain amount of inlet water pressure to operate efficiently.
Other Features:
• **TDS Reduction:**
RO plants can reduce Total Dissolved Solids (TDS) in water by up to 95-99%.
• **pH Level:**
RO plants can produce water with a pH level in the alkaline range.
• **Auto Shut-Off:**
Many RO plants have an automatic shut-off feature for safety and energy efficiency.
• **Faucet:**
RO plants typically come with a dedicated faucet for accessing purified water.
• **Installation:**
RO plants can be installed in various locations, such as wall-mount or countertop with a stand. | | | |
| | Telephone sets/steno sets | • -COLOR BACKLIT DISPLAY WITH ADJUSTBLE DISPLAY.
• -FSK & DTMF DUAL SYSTEM CALLER I.D DISPLAY.
• -IDD KEY LOCK.
• -MUSIC ON-HOLD FUNCTION.
• -RINGER VOLUME CONTROL.
• -HANDFREE VOLUME CONTROL.
• -TONE/PULSE DIALING MODE SWITCH.
• -INCOMING & OUTINGING CALLS LOG INFORMATION (CALLING IN OR CALLED OUT NUMBER,
• DATE & TIME ETC).
• -NEW CALL INDICATOR.
• -24 / 16 RING TONES.
• -PRE-DAILING FUNCTION.
• -PAUSE FUNCTION.
• -REDAIL FUNCTION. | 05 | | |

		• -FLASH FUNCTION. • -AUTO REDAIL FUNCTION			
	NVR 16CH	• **Facial Recognition** • Facial Detection and AnalyticsFace picture comparison, human face capture, face picture search • Face Picture LibraryUp to 16 face picture libraries, with up to 50,000 face pictures in total (each picture ≤ 4 MB, total capacity ≤ 1 GB) • Facial Detection and Analytics Performance1-ch human face capture (HD network camera, up to 8 MP, H.264/H.265) • Face Picture Comparison4-ch • **Motion Detection 2.0** • By DeviceAll channels, 4 MP video analysis for human and vehicle recognition to reduce false alarm • By CameraAll channels • **Perimeter Protection** • Human/Vehicle Analysis2-ch, 4 MP (HD network camera, up to 8 MP, H.264/H.265) video analysis for human and vehicle recognition to reduce false alarm • **Video and Audio** • IP Video Input16-ch • Incoming Bandwidth160 Mbps • Outgoing Bandwidth160 Mbps • HDMI 1 Output4K (3840×2160)/60 Hz, 4K (3840×2160)/30 Hz, 1920×1080/60 Hz, 1600×1200/60 Hz, 1280×1024/60 Hz, 1280×720/60 Hz, 1024×768/60 Hz • HDMI 2 Output1920×1080p/60 Hz, 1280×1024/60 Hz, 1280×720/60 Hz, 1024×768/60 Hz • VGA 1 Output1920 × 1080p/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz • VGA 2 Output1920 × 1080p/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz • Video Output Mode HDMI 1 and VGA 1 provide simultaneous video output, and work as the main output; HDMI 2 and VGA 2 provide simultaneous video output, and work as the auxiliary output • Audio Output2-ch, RCA (Linear, 1 K Ω) • Two-Way Audio1-ch, RCA (2.0 Vp-p, 1 KΩ, using the audio input) • **Decoding** • Decoding FormatH.265+/H.265/H.264+/H.264 • Recording Resolution12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF • Synchronous playback16-ch • Decoding Capability AI on: 1-ch@12MP (30fps)/2-ch@8 MP (30 fps)/4-ch@4 MP (30 fps)/8-ch@1080p(30 fps) AI off: 2-ch@12MP (30fps)/3-ch@8 MP (30 fps)/6-ch@4 MP (30 fps)/12-ch@1080p(30 fps) • Stream TypeVideo, Video & Audio • Audio CompressionG.711ulaw/G.711alaw/G.722/G.726/A	4		

		AC • **Network** • Remote Connection128-ch • Network ProtocolTCP/IP, DHCP, IPv4, Hik-Connect, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP™, HTTP, HTTPS • Network Interface2, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface • **Auxiliary Interface** • Serial Interface1 RS-232, 1 RS-485 • SATA8 SATA interfaces • eSATA1 eSATA interface • CapacityUp to 10 TB capacity for each disk • Alarm In/Out16/9, the 9th alarm supports control 12V. • USB InterfaceFront panel: 2 × USB 2.0; Rear panel: 1 × USB 3.0 • Power output12V DC • **General** • Power Supply100 to 240 VAC, 50 to 60 Hz • Consumption≤ 30 W (without HDD) • Working Temperature-10 °C to 55 °C (14 °F to 131 °F) • Working Humidity10 to 90 % • Dimension (W × D × H)445×476×95 mm (17.5"×18.7"×3.7") • Weight≤ 8 kg (17.6 lb) • **Certification** • Obtained CertificationCE, FCC, CB, IC, RCM, KCC, ICE-003 • FCCPart 15 Subpart B, ANSI C63.4-2014 • CEEN 55032:2015, EN 61000-3-2, EN 61000-3-3, EN 50130-4			
	Fix Tarmal Camera **Detection Range Table/Smart Function Range** • VCA Range for Humans70 m • VCA Range for Vehicles210 m	**Specification** • **Thermal Module** • **Optical Module** • **Image Effect** • **Illuminator** • **Smart Function** • **Video and Audio** • **Network** • **Interface** • **General**	6		

- **Detection Range Table/Smart Function Range**

  - **Thermal Module**
  - Image SensorVanadium Oxide Uncooled Focal Plane Arrays
  - Resolution384 x 288
  - Pixel Pitch17 μm
  - Spectral Range8 μm to 14 μm
  - Focal Length9.7 mm
  - IFOV1.75 mrad
  - ApertureF1.0
  - Field of View37.5° × 28.5° (H × V)
  - Min. Focusing Distance1 m
  - Digital Zoom×2, ×4
  - **Optical Module**
  - Image Sensor1/2.7" Progressive Scan CMOS
  - Resolution2688 × 1520
  - Min. Illumination0.0089Lux @(F1.6,AGC ON) ,0 Lux with IR
  - Field of View84° × 44.8° (H × V)
  - Focal Length4 mm
  - Shutter Speed1 s to 1/100,000 s
  - White BalanceMWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light
  - Day & Night ModeIR Cut Filter with Auto Switch
  - WDR120 dB
  - ApertureF 1.6
  - **Image Effect**
  - Bi-spectrum Image FusionDisplay the details of optical channel on thermal channel
  - Picture in PictureDisplay partial image of thermal channel on the full screen of optical channel
  - Target ColorationYes. Supported in white hot and black hot mode.
  - **Illuminator**
  - IR DistanceUp to 30 m
  - IR Intensity and AngleAutomatically adjusted
  - **Smart Function**
  - VCA4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total.
  - Temperature Measurement3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line)
  - Temperature Range-20 °C to 150 °C (-4 °F to 302 °F)
  - Temperature Accuracy± 8 °C (±14.4 °F)
  - **Video and Audio**
  - Main Stream

Optical channel
50 HZ: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
60 HZ: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
Thermal channel
25 fps (1280×720P, 704×576, 352×288, 384×288)

  - Sub-stream

Optical channel
50 HZ: 25 fps (704 × 576, 352 × 288)
60 HZ: 30 fps (704 × 480, 352 × 240)
Thermal channel

		25 fps (704 × 576, 352 × 288, 384 × 288)			
		• Video Compression Main Stream: H.265/H.264 Sub-Stream: H.265/H.264/MJPEG • Audio CompressionG.722.1/G.711ulaw/G.711alaw/MP2L2 /G.726/PCM • **Network** • ProtocolsIPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,SSL • Network StorageMicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR) • APIISAPI, HIKVISION SDK, and third-party management platform, Open Network Video Interface,ONVIF (Profile S, Profile G) • Simultaneous Live ViewUp to 20 channels • User/Host levelUp to 32 users, 3 levels: Administrator, Operator, User • SecurityUser authentication (ID and password), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering • ClientiVMS-4200, Hik-Connect • **Interface** • Alarm Input2, alarm input (0-5 VDC) • Alarm Output2, alarm output (alarm response actions configurable) • Alarm ActionSD recording/Relay output/Smart capture/FTP upload/Email linkage • Audio Input 1, 3.5 mm Mic in/Line in interface Line input: 2 - 2.4 V [p-p], output impedance: 1 KΩ ± 10% • Audio OutputLinear level, impedance: 600 Ω • Communication Interface 1, RJ45 10 M/100 M Self-adaptive Ethernet interface. 1, RS-485 interface (half duplex) • Analog Output1.0V [p-p]/75Ω, PAL/NTSC/BNC • **General** • Menu Language32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil) • Power Supply 24 VAC ± 25%, 12 VDC ± 25%,24VDC two-core terminal block PoE (802.3af, class 3) • Power Consumption 24 VAC ± 25%: 0.8 A to 0.5 A, max. 9.5 W 12 VDC ± 25%: 0.63 A to 1.06 A, max. 9 W 24VDC: 0.4A, max 9.5W PoE (802.3af, class 3): 36 V to 57 V, 0.28 A to 0.17 A, max. 10 W • Working Temperature/Humidity Temperature: -40°C to 65°C (-40°F to 149°F) Humidity: 95% or less			

		• Protection Level IP67 Standard TVS 4000V lightning protection, surge protection, voltage transient protection IK10-rated housing • Dimensions376.1 mm × 119.1 mm × 118.1 mm (14.81" × 4.68" × 4.65") • Weight1.82 kg (4.01 lb) • **Detection Range Table/Smart Function Range** • VCA Range for Humans70 m • VCA Range for Vehicles210 m			
	Fix Tarmal Camera • **Detection Range Table/Smart Function Range** • VCA Range for Humans130 m • VCA Range for Vehicles390 m	**Specification** • **Thermal Module** • **Image Effect** • **Smart Function** • **Video and Audio** • **Network** • **Interface** • **General** • **Detection Range Table/Smart Function Range** • **Thermal Module** • Image SensorVanadium Oxide Uncooled Focal Plane Arrays • Resolution384 × 288 • Pixel Pitch12 μm • Spectral Range8 μm to 14 μm • NETD< 35 mK (25°C, F1.0) • Focal Length13 mm • IFOV0.92 mrad • Field of View20° × 15° (H × V) • Min. Focusing Distance2m • ApertureF1.0 • Digital Zoom2×, 4×, 8× • **Image Effect** • Target ColorationYes. Supported in white hot and black hot mode. • **Smart Function** • VCA4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), up to 8 VCA rules in total • Temperature Measurement3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line)	4		

| | | Temperature Range-20°C to 150°C (-4°F to 302°F) Temperature Accuracy± 8°C (± 14.4°F) **Video and Audio** Main Stream25 fps (1280 × 720, 704 × 576, 640 × 512, 352 × 288) Sub-stream25 fps (704 × 576, 640 × 512, 352 × 288) Third Stream25 fps (1280 × 720, 704 × 576, 640 × 512, 352 × 288) Video Compression Main Stream: H.265/H.264
Sub-Stream: H.265/H.264/MJPEG
Third Stream: H.265/H.264/MJPEG
Audio CompressionG.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM
Network
ProtocolsIPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE, SRTP, SFTP, SSL
APIISAPI, HIKVISION SDK, and third-party management platform, Open Network Video Interface,ONVIF (Profile S, Profile G)
SecurityUser authentication (ID and password), MAC address binding, HTTPS encryption, IEEE 802.1x (EAP-MD5, EAP-TLS), access control, IP address filtering
Simultaneous Live ViewUp to 20 channels
ClientiVMS-4200, Hik-Connect
Web Browser
Live view (plug-in allowed): Internet Explorer 11
Live view (plug-in free): Chrome 57.0 +, Firefox 52.0 +
Local service: Chrome 57.0 +, Firefox 52.0 +
Network StorageMicroSD/SDHC/SDXC card (up to 256 GB) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
User/Host levelUp to 32 users, 3 levels: Administrator, Operator, User
Interface
Analog Output1.0V [p-p]/75Ω, PAL/NTSC/BNC
Alarm Input2, alarm input (0 to 5 VDC)
Alarm Output2, alarm output (alarm response actions configurable)
Alarm ActionSD recording/Relay output/Smart capture/FTP upload/Email linkage
Audio Input
1, 3.5 mm Mic in/Line in interface
Line input: 2 to 2.4 V [p-p], output impedance: 1 KΩ ± 10%
Audio OutputLinear level, impedance: 600 Ω
Communication Interface
1, RJ45 10 M/100 M self-adaptive Ethernet interface
1, RS-485 interface (half duplex)
General
Web Client Language
32 languages
English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil) | | | |

		• Power Supply 24 VAC ± 25%, 12 VDC ± 25%, two-core terminal block PoE (802.3af, class 3) • Power Consumption 24 VAC ± 25%: 0.13 A to 0.22 A, Max. 5 W 12 VDC ± 25%: 0.37 A to 0.61 A, Max. 5 W PoE (802.3af, class 3): 44 V to 57 V: 0.1 A to 0.13 A, Max. 5.5 W • Working Temperature/Humidity Temperature: -40 °C to 65 °C (-40 °F to 149 °F) Humidity: 90% or less • Protection Level IP67 Standard TVS 6000V lightning protection, surge protection, voltage transient protection IK10-rated housing • Dimensions351.3 mm × 113.5 mm × 115.2 mm (13.83" × 4.47" × 4.53") • WeightApprox. 1.77 kg (3.90 lb) • **Detection Range Table/Smart Function Range** • VCA Range for Humans130 m • VCA Range for Vehicles390 m			
	ANPR Camera (4MP) Number plate/Face Detect	**Camera** • Image Sensor Channel 1: 1/1.2" Progressive Scan CMOS, Channel 2: 1/1.8 Progressive Scan CMOS" • Max. ResolutionChannel 1: 3840 × 2160, channel 2: 2560 × 1440 • Min. Illumination Channel 1: Color: 0.0005 Lux @ (F1.2, AGC ON), 0 Lux with Light, B/W: 0.0005 Lux @ (F1.2, AGC ON), 0 Lux with IR, Channel 2: Color: 0.0003 Lux @ (F1.0, AGC ON), 0 Lux with Light • Shutter Time1 s to 1/100,000 s • Day & Night IR cut filter, Blue glass module (less ghost phenomenon) • Angle AdjustmentPan: 0° to 355°,tilt: 0° to 90°,rotate: 0° to 360° • **Lens** • Focal Length & FOV Channel 1: 10 to 50 mm: horizontal FOV 36° to 13.1°, vertical FOV: 20.4° to 7.4°, diagonal FOV 41.8° to 14.9° Channel 2: 4 mm: horizontal FOV: 89°, vertical FOV: 45°, diagonal FOV: 107° • FocusChannel 1: Auto, semi-auto, manual • Iris Type Channel 1: P-iris, Channel 2: Fixed • Aperture Channel 1: Constant F1.6 throughout the zoom range, Channel 2: F1.0 • **DORI** • DORI Channel 1: Wide: D:241.4 m, O: 95.8 m, R: 48.3 m, I: 24.1 m Tele: D: 620.7 m, O: 246.3 m, R:124.1 m, I: 62.1 m Channel 2: D:77 m, O: 30.5 m, R: 15.4 m, I: 7.7 m • **Illuminator**	5		

		- Supplement Light TypeHybrid (IR and White Light) - Supplement Light Range Channel 1: up to 120 m, Channel 2: up to 30 m - Smart Supplement LightYes - IR Wavelength850 nm **Video** - Main Stream Channel 1: 50 Hz: 25 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 24 fps (3840 × 2160, 3072 × 1728, 2560 × 1440, 1920 × 1080, 1280 × 720) Channel 2: 50 Hz: 25 fps (2560 × 1440, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2560 × 1440, 1920 × 1080, 1280 × 720) - Sub-Stream Channel 1: 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 24 fps (704 × 480, 640 × 480) Channel 2: 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480) - Third Stream Channel 1: 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 24 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480) Channel 2: 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 30 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480) - Fourth Stream Channel 1: 50 Hz: 25 fps (1920 × 1080, 1280 × 720, 704 × 576, 640 × 480) 60 Hz: 24 fps (1920 × 1080, 1280 × 720, 704 × 480, 640 × 480) Channel 2: 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480) - Fifth Stream Channel 1: 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 24 fps (704 × 480, 640 × 480) Channel 2: 50 Hz: 25 fps (704 × 576, 640 × 480) 60 Hz: 30 fps (704 × 480, 640 × 480) - Video Compression Main stream: H.265+/H.265/H.264+/H.264, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264, Fourth stream: H.265/H.264/MJPEG, Fifth stream: H.265/H.264/MJPEG - Video Bit Rate32 Kbps to 16 Mbps - H.264 TypeBaseline Profile,Main Profile,High Profile - H.265 TypeMain Profile - Bit Rate ControlCBR,VBR - Scalable Video Coding (SVC)H.264 and H.265			

		encoding • Region of Interest (ROI)4 fixed regions for each stream • Target CroppingYes • **Audio** • Audio TypeMono sound • Audio CompressionG.711/G.722.1/G.726/MP2L2/PCM/MP3/AAC-LC • Audio Bit Rate64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC-LC) • Audio Sampling Rate8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz • Environment Noise FilteringYes • **Network** • ProtocolsTCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv4/IPv6, UDP, Bonjour, SSL/TLS, WebSocket, WebSockets • Simultaneous Live ViewUp to 20 channels • APIOpen Network Video Interface (Profile S, Profile G, Profile T),ISAPI,SDK,ISUP • User/Host Up to 32 users 3 user levels: administrator, operator, and user • SecurityPassword protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2, TLS 1.3 • Network Storage NAS (NFS, SMB/CIFS),Auto Network Replenishment (ANR), Together with high-end Hikvision memory card, memory card encryption and health detection are supported. • ClientiVMS-4200,Hik-Connect • Web Browser Plug-in required live view: IE 10, IE11, Plug-in free live view: Chrome 57.0+, Firefox 52.0+ • **Image** • Image Parameters SwitchYes • Image SettingsSaturation,brightness,contrast,sharpness,AGC,white balance,adjustable by client software or web browser • Day/Night Switch Channel 1: Day, Night, Auto, Schedule, Alarm Trigger, Video Trigger, Channel 2: Day, Night, Auto, Schedule, Alarm Trigger • Wide Dynamic Range (WDR)140 dB • Image Enhancement Channel 1: BLC, HLC, 3D DNR, Defog, EIS, Channel 2: BLC, HLC, 3D DNR, Defog • Privacy Mask8 programmable polygon privacy masks • Picture OverlayLOGO picture can be overlaid on video with 128 × 128 24 bit bmp format.			

| | | **Interface** Video Output1 Vp-p Composite Output (75 Ω/CVBS) (Only for debugging) Ethernet Interface1 RJ45 10 M/100 M/1000 M self-adaptive Ethernet port On-Board StorageBuilt-in memory card slot, support microSD/microSDHC/microSDXC card, up to 256 GB Audio 1 input (line in), 3.5 mm connector, three-contact, max. input amplitude: 3.3 Vpp, input impedance: 4.7 KΩ, interface type: non-equilibrium,
1 output (line out), 3.5 mm connector, three-contact, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium, mono sound
Alarm2 inputs, 2 outputs (max. 24 VDC, 1 A)
RS-4851 RS-485 (Half duplex, HIKVISION, Pelco-P, Pelco-D, self-adaptive)
Reset KeyYes
Power Output12 VDC, max. 50 mA
Event
Basic EventMotion detection,video tampering alarm,network disconnected,IP address conflict,illegal login,HDD full,HDD error,video quality diagnosis, vibration detection
Smart EventScene change detection,audio exception detection,defocus detection
LinkageUpload to FTP/NAS/memory card,notify surveillance center,send email,trigger alarm output,trigger recording,trigger capture,white light flashing
Deep Learning Function
Multi-target-type Detection
Channel 1,
Detects up to 60 targets simultaneously,
Supports simultaneous detection and capture of human body, face and vehicle,
Gets 7 face features,
Gets 13 human body features,
Gets 2 vehicle features
Face Capture
Channel 1,
Detects up to 120 faces simultaneously,
Supports swing left and right from -60° to 60°, tilt up and down from -30° to 30°,
Uploads face with background and closed-up face pictures
Face Comparison
Channel 1,
Up to 10 face libraries. 30,000 faces for each library. 150,000 faces in total. ,
Recognizes face identity via face modeling, grading and comparing to those in face library,
Supports face library encryption
Perimeter Protection
Channel 1,
Line crossing, intrusion, region entrance, region exiting,
Support alarm triggering by specified target types (human and vehicle),
Channel 2,
Line crossing, intrusion, region entrance, region exiting,
Support alarm triggering by specified target types (human and vehicle) | | | |

- Road Traffic and Vehicle Detection

Channel 1,

Blocklist and allowlist: up to 10,000 records

Support license plate recognition of motorcycles (only in checkpoint scenario)

Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.)

License plate recognition rate ≥98%

- **General**
- Power

Three-core terminal block,

12 VDC ± 20%, 1.90 A, max. 22.7 W,

24 VAC ± 20%, 1.39 A, max. 22.3 W,

PoE: IEEE 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.59 A to 0.44 A, max. 24.7 W

- MaterialAluminum alloy body
- DimensionØ140 mm × 410.1 mm (Ø5.5" × 16.1")
- Package Dimension462 mm × 197 mm × 195 mm (18.2" × 7.76" × 7.68")
- WeightApprox. 2.2 kg (4.85 lb.)
- With Package WeightApprox. 3.38 kg (7.45 lb.)
- Startup and Operating Conditions

With -H: -40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing),

Without -H: -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)

- General FunctionHeartbeat,one-key reset,mirror,password protection,flash log,anti-banding
- Language33 languages: English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
- HeaterYes
- DemistYes
- Storage Conditions-40 °C to 60 °C (-40 °F to 140 °F). Humidity 95% or less (non-condensing)
- **Approval**
- EMC

FCC: 47 CFR Part 15, Subpart B,

CE-EMC: EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN 50130-4: 2011 +A1: 2014,

RCM: AS/NZS CISPR 32: 2015,

IC: ICES-003: Issue 7,

KC: KN32: 2015, KN35: 2015

- Safety

UL: UL 62368-1,

CB: IEC 62368-1: 2014+A11,

CE-LVD: EN 62368-1: 2014/A11: 2017,

LOA: IEC/EN 60950-1

- Environment WD Purple, Seagate Skyhawk AI, or any other survelliance grade HDD

CE-RoHS: 2011/65/EU,

WEEE: 2012/19/EU,

Reach: Regulation (EC) No 1907/2006

- ProtectionIP67: IEC 60529-2013,IK10: IEC 62262:2002
- Anti-Corrosion Protection-Y model: NEMA 4X

		(NEMA 250-2018) • Automotive and RailwayEN50121-4 • OtherPVC FREE			
	HDD	8 TB surveillance grade warranty	15		
	Gigabyte POE Swith 8 Port	Specification Network parameters Port number 8 × gigabit PoE ports, and 2 × gigabit fiber optical ports Port type RJ45 port, full duplex, MDI/MDI-X adaptive Standard IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, and IEEE 802.3z Forwarding mode Store-and-forward switching Working mode Standard mode (default); Extend mode MAC address table 8 K Switching capacity 20 Gbps Packet forwarding rate 14.88 Mpps Internal cache 4.1 Mbits PoE power supply PoE standard IEEE 802.3af, IEEE 802.3at PoE power pin Ethernet cables 1/2/3/6 provide power supply. PoE port Ports 1 to 8 Max. port power 30 W PoE power budget 110 W General Shell Metal material, fan-free design Net weight 1.21 kg (2.67 lb) Gross weight 1.3 kg (2.87 lb) Dimension (L × H × D) 217.6 mm × 108.55 mm × 27.8 mm (8.57" × 4.27" × 1.09") Operating temperature -10°C to 55°C (14°F to 131°F) Storage temperature -40°C to 85°C (-40°F to 185°F) Operating humidity 5% to 95% (no condensation) Relative humidity 5% to 95% (no condensation) Power supply 48 VDC, 2.5 A Power source 120 W Max. power consumption 120 W Power consumption in idle 7 W Software function Device maintenance Support remote upgrade, recovering default parameters, viewing logs, configuring basic network parameters, import and export configuration, time sync. Port configuration Support the configuration of port rate and slow control, and ports enabling. Long range Support up to 300 m transmission. PoE watchdog Ports 1 to 8: auto detect and restart the cameras that do not respond. Port rate-limiting Support rate-limiting for ingress and egress ports.. Storm control Support the storm control of unknown unicast, multicast and broadcast. Port mirroring Support port mirroring function. QoS Support WRR and SP scheduling and port priority. VLAN Support 4094 VLANs. STP Support STP and RSTP. SNMP Support SNMPv1 and SNMPv2c, the node information for system and interfaces acquisition. PoE Support IEEE 802.3at/af power supply. Model DS-3E1510P-EI Approval EMC FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000- 3-2: 2014, EN 61000-3-3: 2013, EN 55024: 2010 +A1: 2015); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 6, 2016) Safety UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013) Chemistry CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006	4		
	Gigabite POE Swith 4 Port Hikvision	**Specification** • **General** • **Network Parameters** • **PoE Power Supply** •	8		

	Dialing Function • **Approval** - **General** - ShellMetal material, fan-free design - Net Weight0.27 kg (0.59 lb) - Dimensions (W × H × D)121.0 mm × 88.1 mm × 27.6 mm (4.76'' × 3.47'' × 1.09'') - Gross Weight0.43 kg (0.95 lb) - Operating Temperature0 °C to 40 °C (32 °F to 104 °F) - Storage Temperature-40 °C to 85 °C (-40 °F to 185 °F) - Operating Humidity5% to 95% (no condensation) - Relative Humidity5% to 95% (no condensation) - Power Supply48 VDC, 1.35 A - Max. Power Consumption65 W - Power Consumption in Idle5 W - Installation ModeDesk-Mounted - Surge Protection6 KV - **Network Parameters** - Ports4 × Gigabit PoE port,1 × Gigabit RJ45 port - MAC Address Table2 K - Switching Capacity10 Gbps - Packet Forwarding Rate7.44 Mpps - Internal Cache1 Mbits - **PoE Power Supply** - PoE StandardIEEE 802.3af,IEEE 802.3at,IEEE 802.3bt - PoE Power Pin8-pin power: 1/2(-), 3/6(+), 4/5(+), 7/8(-) - PoE Port Hi-PoE: Port 1 PoE: Ports 2 to 4 - Max. Port Power Port 1: 60 W Ports 2 to 4: 30 W - PoE Power Budget60 W - **Dialing Function** - Long Range Ports 3 to 4: up to 300 m Long range performance may vary depend on camera model or cable condition. - Port IsolationPorts 1 to 4: port isolation mode to improve network security. - PoE WatchdogPorts 1 to 4: auto detect and restart the cameras that do not respond. - **Approval** - EMCFCC (47 CFR Part 15, Subpart B),CE-EMC (EN 55032: 2015+A11: 2020, EN IEC 61000-3-2: 2019, EN 61000-3-3: 2013+A1: 2019, EN 50130-4: 2011+A1: 2014, EN 55035: 2017+A11: 2020),IC (ICES-003: Issue 7:2020),RCM (AS/NZS CISPR 32: 2015) - SafetyUL (UL 60950-1),CB (AMD1:2009, AMD2:2013, IEC 62368-1: 2014 (Second Edition), CE-LVD (EN 62368-1: 2014+A11: 2017) - ChemistryCE-RoHS (2011/65/EU)			

	Gigabyte Switch Metal body Cisco	8-Port 10/100 + 2-Port Gigabit SP Switch Specifications Model SPS208G Ports 8 RJ-45 Connectors for 10BASE-T and 100BASE-TX, 1 RJ-45 Connectors for 10BASE-T/100BASE-TX/1000BASE-T, and 1 MiniGBIC/SFP Port Console Port Auto MDI/MDI-X Auto-Negotiate/Manual Setting Cabling Type UTP CAT 5 or Better for 10BASE-T/100BASE-TX, UTP CAT 5e or Better for 1000BASE-T LEDs 10/100 Link/Act, Giga Link/Act, Speed, MiniGBIC Link/Act, Speed, System Switching Capacity 5.6 Gbps Non-Blocking Forwarding Rate 4.17 Mpps Wire-Speed Performance Layer 2 MAC table size 8K Number of VLANs 256 Active VLANs (4096 Range) VLAN Port-Based and 802.1Q Tag-Based VLANs Q-in-Q Stacking VLAN Management VLAN HOL Blocking Head of Line Blocking Prevention MVR Multicast VLAN Registration Implementation also known as Multicast TV VLAN Management Web User Interface Built-in Web UI for Easy Browser-Based Configuration (HTTP/HTTPS) CLI interface CLI Support via Console Port or Telnet SNMP SNMP Version 1, 2c, 3 with Support for Traps SNMP MIBs RFC1213 MIB-2, RFC2863 Interface MIB, RFC2665 Ether-like MIB, RFC1493 Bridge MIB, RFC2674 Extended Bridge MIB (P-bridge, Q-bridge), RFC2819 RMON MIB (groups 1,2,3,9 only), RFC2737 Entity MIB, RFC 2618 RADIUS Client MIB RFC 1215 Traps RMON Embedded Remote Monitoring (RMON) Software Agent Supports Four RMON Groups (History, Statistics, Alarms, and Events) for Enhanced Traffic Management, Monitoring, and Analysis Firmware Upgrade CLI Upgrade and Web Browser Upgrade (HTTP) and TFTP Port Mirroring Traffic on a Port can be Mirrored to Another Port for Analysis with a Network Analyzer or RMON Probe Other Management Traceroute Secure Socket Layer (SSL) Secure Shell (SSH) RADIUS Port Mirroring TFTP Upgrade SSL Security for Web UI DHCP Client BootP SNTP Xmodem Upgrade Cable Diagnostics PING Telnet Client (SSH Secure Support) Security IEEE 802.1X 802.1X - RADIUS Authentication. MD5 Encryption 802.1X Multiple Sessions Authentications on per Host basis Access Control ACLs - Drop or Rate Limit based on: Source and Destination MAC-Based Source and Destination IP address Protocol TOS/DSCP Port VLAN Ethertype Access Security DHCP Snooping IP Source Guard Dynamic ARP Inspection L2 DHCP Relay and Option 82 STP Root Guard Availability Link Aggregation Link Aggregation using IEEE 802.3ad LACP Up to 8 Ports in up to 8 Groups Storm Control Broadcast, Multicast and Unknown Unicast Spanning Tree IEEE 802.1D Spanning Tree, IEEE 802.1w Rapid Spanning Tree, IEEE 802.1s Multiple Spanning Tree, STP Root Guard IGMP Snooping IGMP (v1/v2) snooping provides for fast client joins and leaves of multicast streams and limits bandwidth-intensive video traffic to only the requestors Supports 256 Multicast Groups QoS Priority levels 4 Hardware Queues Scheduling Priority Queuing and Weighted Round Robin (WRR) Class of Service Port-Based 802.1p VLAN Priority Based IPv4/v6 IP Precedence/TOS/DSCP Based TCP/UDP Port Based Diffserv Classification and Remarking ACLs Rate Limiting Ingress Policer Egress Rate Control Standards 802.3 10BASE-T Ethernet, 802.3u 100BASE-TX Fast Ethernet, 802.3ab 1000BASE-T Gigabit Ethernet, 802.3z Gigabit Ethernet, 802.3x Flow Control, 802.3 ad LACP, 802.1D STP, 802.1Q/p VLAN, 802.1w Rapid STP, 802.1s Multiple STP, 802.1X Port Access Authentication Environmental	10		

		Dimensions 11" x 1.75" x 6.69" (279.4 x 44.5 x 170 mm) Weight 2.20 lb (1 kg) Power External AC Power Adapter Certification FCC Part15 Class A, CE Class A, UL, cUL, CE mark, CB Operating Temp. 32 to 104˚F (0 to 40˚C) Storage Temp. -4 to 158˚F (-20 to 70˚C) Operating Humidity 10 to 90% Storage Humidity 10 to 95% Package Contents One SPS208G with 8 10BASE-T/100BASE-TX, 1 1000 BASE-T with RJ-45, and 1 Gigabit MiniGBIC One AC Power Adapter with Power Cord Two Rack Mounting Kits/Eight Screws One CD with User Guide in PDF Format One Registration Card Console Cable Minimum Requirements Web-based Utility: Web Browser- Microsoft Internet Explorer (Version 5.5 or Above) or Mozilla Firefox (Version 2.0.0.1) CAT5 Ethernet Network Cable			
	Cat-6 Cable Roll 23AWG Orignal	specification, supports 250 MHz bandwidth frequency and 5 Gbp/s transmission speed at 328 feet (100 meters). Cat6A cable must support bandwidth frequencies at 500 MHz and support 10 Gigabit speed to the maximum length that any Ethernet cable can be run (100 meters or 328 feet).	6		
	RJ45 Connector BayLan	Most standard Ethernet data cables have a core consisting of four twisted-pair wire strands, making eight individual wires in total. Male RJ45 plugs separate and correctly terminate these eight individual wires. In other words, RJ45 wiring is based on an 8P8C (8 position, 8 contact) configuration. Standard RJ45 is defined as a mechanically-keyed variant on a generic 8P8C body. Mechanically keyed essentially means that RJ45 connectors also include an additional tab. This extra tab is designed to prevent them from being mated with any other socket standards which are visually similar, but electrically incompatible. It also prevents accidental disconnection. For an RJ45 network connector to function properly, the eight Ethernet cabling wires must be inserted into the correct pinout locations on the male connector. With RJ45, this is done following either a T568A or T568B wiring standard. Each of these standards has its own colour-coded wiring convention, achieving two different forms of connectivity.	1		
	Water Proof Box Small Size 4*6	**Material** Polyvinyl Chloride **Style** Compact **Finish Type** Painted **Installation Type** Mounting	10		
	water proof box Big Size 10*12	**Material** Polyvinyl Chloride **Style** Compact **Finish Type** Painted **Installation Type** Mounting	5		
	Fiber Madia Converter Gigabite SFP Support	Key Features and Benefits: • **Media Conversion:** Converts between 1000BASE-SX/LX fiber and 10/100/1000Base-T copper media. • **Extended Distance:** Enables extending the reach of Gigabit Ethernet networks over fiber optic cabling, going beyond the limitations of copper cabling. • **SFP Support:** Uses interchangeable SFP modules,	15		

		providing flexibility for different fiber types and connection distances. • **Hot-Swappable:** SFP modules can be replaced while the media converter is operational. • **Speed Support:** Often supports 10/100/1000Mbps speeds. • **Applications:** Suitable for connecting devices across multiple buildings, remote surveillance, and automated factory equipment.			
	SC (Subscriber Connector) OFC Patch Card	specifications: Connector: • **Type:** SC (push-pull, snap-in, square, or standard connector). • **Ferrule:** 2.5mm diameter. • **Duplex:** Often available in duplex (two SC connectors bound together) configurations for ease of use. • **Key:** SC connectors often have a key that prevents incorrect connection of the fiber. Performance: • **Insertion Loss:** Typically less than 0.25dB. • **Return Loss:** High return loss ensures reliable signal transmission. • **Durability:** Rated for at least 1000 mating cycles. Applications: • **Datacom:** Commonly used in data communication applications. • **Telecom:** Also widely used in telecommunications. • **FTTH:** SC connectors are a popular choice for Fiber To The Home (FTTH) applications. Materials and Dimensions: • **Ferrule:** Typically made of zirconia ceramic. • **Housing:** Durable plastic housing. • **Jacket:** Various materials and colors, often 2.0mm or 3.0mm OD. • **Length:** Standard length varies depending on the connector type and boot. Standards: • SC connectors adhere to standards like IEC 61754-4 and TIA 604-3. 9/125 microns).	15		
	Wireless Mouse Rechargable (A4Tech)	# SPECIFICATIONS Model: G11-570FX Type: Wireless Connection: 2.4G Hz Ergonomic Design: Right-hand Fit Sensor: Optical Resolution: 5-Level Adjustable 2000 DPI Report Rate: 125 Hz Buttons No.: 7	4		

		Receiver: Nano USB Receiver			
		Power Source: Lithium Battery			
		System Requirements: Windows XP / Vista / 7 / 8 / 8.1 / 10			

	LED Screen 24/07 monitoring 43" 4k	**General Features**
		   • **Size**
		43"
		   • **CPU**
		Cortex A55*5 1.5GHz（normal）1.9GHz max*
		   • **GPU**
		Mali G57 MC1 800MHz
		   • **OS**
		Android 12
		   • **RAM/ROM**
		2gb RAM/16gb ROM
		   • **UI Style**
		Google TV
		   • **Power Consumption**
		115W
		   • **Wi-fi**
		Yes
		   • **Voice Control**
		Yes
		Display
		   • **Display Resolution**
		3840x2160
		   • **UHD Support**
		Yes
		   • **HDR**
		HDR10+
		   • **Brightness (cd/m2)**
		320 nits
		   • **Contrast Ratio**
		5000:1
		   • **Response Time (G to G)**
		6.5 ms
		   • **Colors**
		1.07 billion
		   • **Refresh Rate**
		60Hz
		Audio
		   • **Speaker Type**
		2x10 W
		   • **Audio Power Output（THD=7%**
		20W
		   • **Dolby Atmos**
		Yes
		   • **DTS**
		Yes
		Connectivity
		   • **HDMI**
		Yes
		   • **HDMI&HDCP Version**
		HDMI 2.1
		   • **Cable Port**
		Yes
		   • **USB**
		USB 3.0
			5		

	SFP Module	Key Specifications: • **Data Rates:** Support a wide range of data rates, including 100 Mbps, 1 Gbps, 10 Gbps, 25 Gbps, and higher. • **Fiber Optic vs. Copper:** Available for both optical fiber (single-mode and multimode) and copper (twisted pair) connections. • **Connector Type:** Typically use LC connectors for fiber optic connections. • **Operating Temperature:** Can operate in various temperature ranges, typically from 0°C to 70°C (32°F to 158°F) for commercial applications and -40°C to 85°C (-40°F to 185°F) for industrial applications. • **Power Supply:** Usually require a single +3.3V power supply. • **Standards Compliance:** Adhere to industry standards like MSA SFP, G.959.1, SFF-8472, and FC-PI. • **Dimensions:** Standard physical dimensions are 2.2" L x 0.4" H x 0.5" W (5.6 cm x 1.0 cm x 1.3 cm). • **RoHS Compliance:** Many SFP modules are RoHS compliant, meaning they meet environmental restrictions on the use of certain hazardous substances. • **Digital Diagnostic Monitoring (DDM):** Some SFP modules offer DDM functionality for monitoring key parameters like temperature, voltage, and laser bias current.	8		
	SMD lights 8x8 inches & 2x2 feet	Features Super dynamic shape Low maintenance cost Gleaming white powder paint Lining designed, screw less upper case diffuser External isolated driver with built-in SPD	150 + 50		
	2 pin and 3 pin plugs, switches and other electric accessories	Key Feature 2-Pin and 3-Pin Plugs **Feature** / **2-Pin Plug** / **3-Pin Plug** Number of Pins — Two (Live and Neutral) — Three (Live, Neutra Grounding — Not available — Grounding provided Safety — Moderate — High due to the ear Applications — Low-power devices — High-power devices	05 pac kets eac h		
	Cable 3/29 and 7/29 and light gauge cables	Key Specifications of a3/29 cable; • **Conductor:** 3 stranded copper wires with a diameter of 0.029 inches. • **Insulation:** PVC (Polyvinyl Chloride). • **Voltage Rating:** 250/440V. • **Core Count:** Single core. • **Length:** 90 meters per coil. • **Application:** General wiring, suitable for domestic and commercial lighting and appliances. • **Operating Temperature:** Typically ranges from -15°C to 85°C.	05 bun dles eac h		

		Key Features of a 7/29 Cable: • **Conductor:** Typically made of 99.99% pure copper wire. • **Insulation:** Usually PVC (Poly Vinyl Chloride). • **Size:** Equivalent to a 2.5 mm² cable in terms of cross-sectional area. • **Voltage Rating:** Generally rated for 250/440V. • **Stranding:** Consists of 7 strands, each with a diameter of approximately 0.74 mm. • **Usage:** Commonly used for house wiring, commercial wiring, and other general electrical applications.			
	Extension boards	With best quality material, having 3 pin plugs and 2 pin plugs, with minimum 12 meter copper extension cable	30		
	Tube lights		30		
	Ladders	Metallic ladders from 8 to 10 feet height with stand support.	4		

IT IS HERE BY GUARANTEED THAT

i)   The Stores will be supplied exactly in accordance with the requirement /specification.

ii)   The Stores will be supplied within 15 days after receipt of Contract.

iii)   Offer is valid upto 30.06.2025

Name & Address of Firm._____

Signature & Stamp of Authorized Rep: _____

Tel: No._____

Mob:No._____

Email Address: _____

BID DECLARATION FORM

Name of the interested firm: _____

Name of Representative: _____

Address of Firm.   _____

CNIC NO: _____
                                    (please attach copy of CNIC)

NTN No.   _____
                                    (Please attach copy of NTC certificate)

GST No.   _____
                                    (Please attach copy of GST Certificate)

Price Offered as per **Annex-A**: Rs. _____ in words:_____

_____

Value of Earnest Money: Rs. _____

Declaration: I certify that, to the best of my knowledge and belief, all of the information on and attached is true, correct and made in good faith. I understand that false and fraudulent information on or attached to this form may be ground for not entertaining my bid, or for cancellation after bid acceptance and may be punishable by fine or imprisonment according to law of Pakistan. Moreover I hereby declare that all terms and conditions of bid document are accepted.

Signature & Stamp of Authorized Rep: _____

Tel: No.   _____

Mob:No.   _____

Email Address: _____

DETAIL OF STANDARDS (if applicable)

S. #	Meets best quality standards (5)	Meets acceptable quality standards (4)	Meets un acceptable quality standards (3)	Does not meet acceptable quality standards (2)
1.				
2.				
3.				
4.				

Delivery / Deliverable accepted since it meets acceptable / best quality standards (5/4)

(Assessment /Evaluation Officers)
Name and Designation