

# **SPECIFICATION FOR CCTV SYSTEM**

## **FOR TENDERING PURPOSE ONLY**

Prepared by:  
Technical Section of  
**Faisalabad Garment City Company, Faisalabad**  
**Phone# 041-8507208**

## **GENERAL POINTS**

### **1.0 GENERAL**

#### **1.1 General Description:**

The CCTV system shall be used for security purpose in Faisalabad Garment City Company, Faisalabad, "herein after FGCC" ( Public Sector Company, Registered under Section 42 of Companies Ordinance 1984/Act, 2017, with Securities & Exchange Commission of Pakistan "SECP") situated at Value Addition City, 1.5 KM, Sahianwala Road, Khurrianwala, Faisalabad.

#### **1.2 The specification covers the supply & installation of CCTV system.**

#### **1.3 The vendor shall study the specification and satisfy himself thoroughly and shall take full responsibility of the smooth, reliable and safe working.**

#### **1.4 All items of instrument shall be completed in all respects and any instrument not covered in the specification but essential for proper installation, operation and maintenance of the instrument shall be included by the Vendor in his offer and the reasons for such inclusion shall be clearly stated.**

### **2.0 SCOPE OF WORK**

#### **2.1 The scope of work includes supply & installation of CCTV System as specified in this specification.**

#### **2.2 Supply of necessary spares.**

#### **2.3 Packaging, forwarding, transport, loading, unloading, precaution against damage during transit etc.**

#### **2.4 Performance Guarantee.**

#### **2.5 Two sets of operation and maintenance manuals.**

#### **2.6 Test Certificate: Vendor shall provide all necessary test certificates.**

### **3.0 SAFETY**

#### **3.1 All equipment's items shall be completed with approved safety devices, wherever a potential hazard to personnel exists, and with provision for safe access to personnel to and around the instrument for Operational and maintenance functions.**

### **4.0 TIME FOR COMPLETION**

#### **4.1 The vendor shall complete supply, and installation of the instrument within one month from the placement of order.**

### **5.0 TEST AND INSPECTION**

#### **5.1 Inspection of the equipment will be done at FGCC.**

#### **5.2 The vendor shall demonstrate all the features of the equipment mentioned in the technical specification.**

#### **5.3 The vendor is solely responsible for installation, system operational at FGCC.**

### **6.0 OPERATION CONDITIONS**

#### **6.1 All equipment shall be designed for smooth, efficient and trouble free operation in tropical humid climate of 45 C ambient and a humidity of 90%.**

#### **6.2 In cases where the offer deviates from the specification, the vendor shall indicate clearly in his offer the specification proposed by him along with details thereof and the reasons for the deviation. Each exception to the specification or other parts of the tender document shall be listed separately by the Vendor. If exceptions are not clearly listed they will not be considered by the Purchaser later.**

## **7.0 DOCUMENTS**

7.1 The vendor shall supply the hard and soft copy of Operation and Maintenance manual in duplicate. All necessary literature giving complete technical details shall be provided. He should also provide the test certificates given by manufacturer.

7.2 The vendor shall provide the original DVD/CD of the software.

7.3 The vendor shall furnish a list of users in Pakistan to whom the similar equipment was supplied.

## **8.0 INSTALLATION**

8.1 It is to be noted again that supply & installation of the system with all accessories, auxiliaries, and any item not covered in the specification but essential for proper installation, operation and maintenance of the CCTV System shall be included and executed by the vendor.

8.2 The supply will not be deemed complete until the commissioning trial of the whole system is carried out by the vendor at FGCC successfully.

## **9.0 PERFORMANCE AND GUARANTEE**

9.1 All necessary tests shall be carried out at FGCC by the vendor to demonstrate whether performance of the instrument conforms to the relevant standards and specifications and meets the functional requirement indicated in the specification.

## **10.0 WARRANTY:**

10.1 The vendor shall provide warranty/guarantee for the entire system for a period of 12 months from the date of commissioning.

10.2 The vendor shall be responsible for routine and breakdown Maintenance and monthly monitoring visit of the equipment during warranty period.

## **11.0 PAYMENT TERMS**

11.1 No advance payment will be made by FGCC, 98 % payment against inspection acceptance delivery and completion of installation / commissioning and balance 2% after the completion of Warranty period.

## **12.0 CAPABILITY AND EXPERIENCE**

12.1 The vendor shall have executed at least three (3) similar kind of work within last three years. The vendor shall submit along the offer the reference list of the similar work. Offers received without the reference list may be rejected. Only those bidders are eligible to apply who have valid NTN No., PRA and GST No. with attested copies of registration numbers as their profile duly issued by FBR / quarters concerned.

## **13.0 PRE-BID DISCUSSIONS**

13.1 Before quoting the vendor shall visit FGCC with prior appointment for understanding the exact Tenders quoted.

## **14.0 TRAINING**

14.1 Vendor shall provide 1 week training about the working of CCTV System and the relevant software.

## **15.0 QUOTATION / BIDDS**

15.1

Vendor should submit bids /quotation in PKR only. The bid shall comprise a single package containing two separate envelopes. Each envelop shall contain separately the financial proposal and the technical proposal;

15.2 Envelops shall be marked as “FINANCIAL PROPOSAL” and TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion.

### **Note:**

Company will use the quality & cost method based formula for (technical & financial) evaluation where applicable and samples may be required from the qualified bidders.

FGCC reserves the right to reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The FGCC shall upon request communicate to any supplier or contractor who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.

## **SPECIFICATION**

### **(1) IP Camera Specification**

4MP IR PoE Network Bullet Camera, 1/3" Progressive Scan CMOS, 0.01 Lux, 2.8/4/6/8mm Focal Length, 30m IR Range, Manual Focus, 120dB WDR, 3D-DNR, BLC, ROI, supports up to Three Streams, Smart Feature Set, Supports up to 128GB SD Card, ANR, IP67 Weatherproof, 12VDC Power Supply.

### **(2) PTZ Specification**

2MP PTZ, 1/2.8" CMOS,H.265+/H.265/H.264+/H.264 codec, 3D DNR, True WDR, Ultra-low light Powered By Dark Fighter Color: 0.005lux/F1.6, B/W:0.001lux/F1.6, Optical Zoom:25x, Digital Zoom:16X, 100m IR , 1920\*1080:30fps, Pan Speed: 0.1° -80°/s, Tilt Speed: 0.1° -80°/s, PoE+&12VDC ,Smart Detection

### **(3) 32 Channel NVR Specification**

32 Channel Network Video Reorder, 8MP Recording Resolution, 256 Mbps Incoming Bandwidth, 160 Mbps Outgoing Bandwidth, 4K HDMI Output Resolution/1080p VGA Output Resolution, support up to H.265+ Decoding Format, 4 SATA Interfaces Supports up to 6TB HDD Each, Supports Two-way Audio, 4/1 Alarm I/O, 12VDC Power Supply.

### **(4) HDD 2TB Specification**

Surveillance Grade Hard Disk Drive

### **(5) Keyboard Mouse (Wireless)**

Optical Wireless Stander Keyboard and Mouse.

### **(6) Display 42"**

Power Supply: 50-60Hz, AC110-240V , Connectivity: HDMI, USB, Resolution: 1920x1080, Display Features: Full HD, Color: Black, With Wall Mount Kit.

### **(7) Network Layer 2 switch 8-Port Gigabit PoE**

Switch should have 8 x 10/100/1000 Mbps Gigabit Ethernet ports with 2 SFP Port for Fiber UP Link.

### **(8) Network Layer 2 switch 24-Gigabit Ports**

Switch should have 8 x 10/100/1000 Mbps Gigabit Ethernet ports with 4 SFP Port for Fiber UP Link

### **(9) Single Mode Fiber Optic Cable**

8core Single Mode optical fiber G652D, Maximum 8 fibers per tube and solid polyethylene fillers,

reinforced plastic (FRP) central strength member, water blocked interstices, taped, polyethylene inner sheathed, corrugated steel tape armored, polyethylene overall sheathed. Sheath Thickness: 2.2mm average, Operating Temperature: -40°C to +70°C, Storage Temperature: -40°C to +70°C. Electrical/Optical Characteristics: Tensile Strength.

**(10) CAT-VI UTP Cable Reel Single**

Cat 6 UTP, 23AWG 4Pair Cable Roll (305Meter)

**(11) CAT-VI UTP Patch Panel 24 Ports**

Should be similar Brand as CAT-VI UTP Cable

**(12) Cable Organizer**

Should be similar Brand as CAT-VI UTP Cable

**(13) Fiber optic ODF**

Fiber optic ODF 12 Ports

**(14) Fiber Optic Patch Cord SC-SC SM**

Should be similar Brand as Single Mode Fiber Optic Cable

**(15) Fiber Optic Patch Cord SC-CL SM**

Should be similar Brand as Single Mode Fiber Optic Cable

**(16) Transceiver SM**

Should be similar Brand as Network Switch.

**(17) Power Cable**

3Core 2.5mm Flexible in meter

**(18) Duct (Size in mm)**

16x38 & 40x40

**(19) HDPE Pipe 63mm**

HDPE Compounded Black Cable Duct Material (for fiber optic cable ducts)

**(20) Camera Pole Material:**

GI Powder Coted Gray Color Height: As Per Actual

**(21) UPS 3 KVA**

Rake Mount with 0.8 Power Factor with Slandered Backup, SNMP Enable.

**(22) Installation Materials**

All type of Extra material like clumps, nails, Cable tie, soft pipe etc. for whole project

**(23) PDU**

8-Ports 1U Universal

## B.O.Q of CCTV System

Sr. #	Hardware	Specifications	Unit.	Qty.	Each Price	Total price
1	IP Camera	4MP IR PoE Network Bullet Camera, 1/3" Progressive Scan CMOS, 0.01 Lux, 2.8/4/6/8mm Focal Length, 30m IR Range, Manual Focus, 120dB WDR, 3D-DNR, BLC, ROI, supports up to Three Streams, Smart Feature Set, Supports up to 128GB SD Card, ANR, IP67 Weatherproof, 12VDC Power Supply.	No.	30		
2	PTZ	2MP PTZ, 1/2.8" CMOS,H.265+/H.265/H.264+/H.264 codec, 3D DNR, True WDR, Ultra-low light Powered By Dark Fighter Color: 0.005lux/F1.6, B/W:0.001lux/F1.6, Optical Zoom:25x, Digital Zoom:16X, 100m IR , 1920*1080:30fps, Pan Speed: 0.1° -80°/s, Tilt Speed: 0.1° -80°/s, PoE+&12VDC ,Smart Detection	No	7		
3	NVR	32 Channel Network Video Reorder, 8MP Recording Resolution, 256 Mbps Incoming Bandwidth, 160 Mbps Outgoing Bandwidth, 4K HDMI Output Resolution/1080p VGA Output Resolution, support up to H.265+ Decoding Format, 4 SATA Interfaces Supports up to 6TB HDD Each, Supports Two-way Audio, 4/1 Alarm I/O, 12VDC Power Supply.	No.	1		
4	HDD 2TB	Surveillance Grade Hard Disk Drive	No.	4		
5	Keyboard Mouse (Wireless)	Optical Wireless Stander Keyboard and Mouse	No.	1		
6	Display 42"	Power Supply: 50-60Hz, AC110-240V Connectivity: HDMI, USB Resolution: 1920x1080 Display Features: Full HD Color: Black With Wall Mount Kit.	No	1		
7	Network Layer 2 switch 8-Port Gigabit PoE	Switch should have 8 x 10/100/1000 Mbps Gigabit Ethernet ports with 2 SFP Port for Fiber UP Link.	No.	2		
8	Network Layer 2 switch 24-Port Gigabit Ports	Switch should have 8 x 10/100/1000 Mbps Gigabit Ethernet ports with 4 SFP Port for Fiber UP Link.	No.	1		

9	Single Mode Fiber Optic Cable	8 core Single Mode optical fiber G652D, Maximum 8 fibers per tube and solid polyethylene fillers, reinforced plastic (FRP) central strength member, water blocked interstices, taped, polyethylene inner sheathed, corrugated steel tape armored, polyethylene overall sheathed. Sheath Thickness: 2.2mm average, Operating Temperature: -40°C to +70°C, Storage Temperature: -40°C to +70°C. Electrical/Optical Characteristics: Tensile Strength.	Meter	700		
10	CAT-VI UTP Cable Reel	Cat 6 UTP,23AWG 4Pair Cable Roll (305Meter)	Reel	7		
11	CAT-VI UTP Patch Panel 24 Ports	Should be similar Brand as CAT-VI UTP Cable	No.	1		
12	Cable Organizer	Should be similar Brand as CAT-VI UTP Cable	No.	1		
13	Fiber optic ODF	Fiber optic ODF 12 Ports	No.	3		
14	Fiber Optic Patch Cord SC-SC SM	Should be similar Brand as Single Mode Fiber Optic Cable	No.	5		
15	Fiber Optic Patch Cord SC-LC SM	Should be similar Brand as Single Mode Fiber Optic Cable	No.	5		
16	Transceiver SM	Should be similar Brand as Network Switch.	No.	4		
17	Power Cable	3 Core 2.5mm Flexible	Meter	950		
18	Duct (Size in mm)	16x38	Feet	1500		
	Duct (Size in mm)	40x40	Feet	1500		
19	HDPE Pipe 63mm	HDPE Compounded Black Cable Duct Material (for fiber optic cable ducts)	Feet	3000		
20	Data Cabinet 42-U	Local	No.	1		
	Camera Pole	Material :GI Powder Coted Grey Color Height : As Per Actual	No.	4		
21	Network Cabinet 9-U Section	Local	No.	2		
22	UPS 3 KVA	Rake Mount with 0.8 Power Factor with Slandered Backup	No.	1		
23	Installation Material	All type of Extra,material like clumps,nail,Cable tie,soft pipe etc.for whole project.	No	4		
24	PDU	8-Ports 1U Universal	No	3		

**Total**

### Installation / Labor Works

Sr.#	Description	Unit	Qty	Each Price	Total Price
1	Laying of Duct	Feet	3000		
2	Laying of UTP Cable per feet	Feet	7000		
3	Laying of HD Pipe Per Feet	Feet	3000		
4	Laying of Fiber optic cable Per Feet	Feet	2300		
5	Digging for laying of HDPE pipe (Depth=36" and width=6") and Back Filling using bricks and caution tape	Feet 2	3000		
6	Hand holes for Fiber Optic Cable. Size (H=3'xW=3'xD=3')	No	4		
7	Fiber Optic Cable Splicing	No	15		
8	Boring crossing the road	Feet	200		
9	OTDR Test Reports of Fiber Optical Cable Per Core	No	10		

### Total

**\*Note:- Actual Quantities will be measured after work done.**