

A.C. Joshi Library
Panjab University, Chandigarh

Please note: Unit prices for all the items (S.No.1-13) should be mentioned separately in the financial bid.

Installation of CCTV Surveillance System(30 Approx.)				
Technical Specification of CCTV cameras				
Sr.No.	Item name	Specifications offered	Compliance to RFP Specification Whether YES/ NO	In case of non-compliance ,deviation from RFP to be specified in unambiguous terms
1.	3 Megapixel IR IP bullet/ dome colored camera			
	Camera Make : Bosch/Honeywell/Sony/Hikvision/Dahua (Vendor should be authorized dealer of the Company and the certificate for the same should be attached). The price should be clearly mentioned against the brand of the Camera.			
	Image Sensor	1/3"3Megapixel progressive scan CMOS or Batter		
	Effective Pixels	2046(H)x1536(V)		
	Scanning System	Progressive		
	Electronic Shutter Speed	Auto/Manual, 1/3(4)~1/100000s		

	Min. Illumination	0.01Lux/F2.0 Color), 0Lux/F2.0(IR on)		
	S/N Ratio	More than 50dB		
	Camera Features			
	Max. IR LEDs Length	30m		
	Day/Night	Auto(ICR)/Color/ B/W		
	Backlight Compensation	BLC / HLC / WDR(120dB)		
	White Balance	Auto/Manual		
	Gain Control	Auto/Manual		
	Noise Reduction	3D		
	Privacy Masking	Up to 4 areas		
	Lens			
	Focal Length	3.6mm		
	Max Aperture	F2.0(F2.0/F2.0)		
	Focus Control	Manual		
	Angle of View	H: 84°/106°/56°		
	Lens Type	Fixed lens		
	Mount Type	Board-in Type		
	Video			
	Compression	H.264/H.264B/H. 264H/ MJPEG		

	Resolution	3M(2046X 1536)/1080P(19 20× 10		
		80)/720P(1280× 720)/D1(704× 576/704× 480)/CIF(352× 288/352× 24		
		0)		
		3M(1~25/30fps)		
	Frame Rate	D1/CIF(1 ~ 25/30fps)		
		720P(1-20fps)		
	Bit Rate	H.264: 32Kbps ~ 10Mbps		
	Corridor Mode	Support		
	Audio			
	Compression	G.711a/ G.711u/ AAC		
	Interface	1/1 channel In/Out		
	Smart function	Tripwire		
		Intrusion		
	Smart detection	Abandoned/Missi ng		
		Scene Change		
		Audio detect		
		Face detect		
	Network			
	Ethernet	RJ-45 (10/100Base-T)		
	Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP,		

		IGMP, SNMP,		
		RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS,		
		Bonjour, 802.1x		
	Compatibility	ONVIF		
	Max. User Access	10 users		
	Smart Phone	iPhone, iPad, Android, Windows Phone		
	Auxiliary Interface			
	Memory Slot	Micro SD Max 128GB		
	Alarm	1/1 channel In/Out		
	General			
	Power Supply	DC12V, PoE (802.3af)		
	Power Consumption	Max 5.5W		
	Working Environment	-20°C~+50°C, Less than 95% RH		
	Ingress Protection	IP67		
	Vandal Resistance	IK10		
	Certifications	CE,FCC,UL		

2.	1.3 Megapixel progressive colored IR IP			
	Camera Make : Bosch/Honeywell/Sony/Hikvision/Dahua			
	Image Sensor	1/3" 1.3Megapixel progressive scan CMOS		
	Effective Pixels	1280(H) × 960(V)		
	Scanning System	Progressive		
	Electronic Shutter Speed	Auto/Manual, 1/3s~1/30000s		
	Min. Illumination	0. 08Lux/F2.1(Color , 0Lux/F2.1(IR on)		
	S/N Ratio	More than 50dB		
	Camera Features			
	Max. IR LEDs Length	30m		
	Day/Night	Auto(ICR)/Color/ B/W		
	Backlight Compensation	BLC / HLC / DWDR		
	White Balance	Auto/Manual		
	Gain Control	Auto/Manual		
	Noise Reduction	3D		
	Privacy Masking	Up to 4 areas		
	Focal Length	3.6mm		

	Max Aperture	F2.1(F2.6)		
	Focus Control	Manual		
	Angle of View	H: 71°(47°)		
	Lens Type	Fixed lens		
	Mount Type	Board-in Type		
	Compression	H.264/ H.264H/ H.264B/ MJPEG		
	Resolution	1.3M(1280x960)/ 720P(1280× 720)/D1(704× 576/704× 480) /CIF(352× 288/352× 240)		
	Frame Rate	1.3M/720P(1 ~ 25/30fps)		
		D1(1 ~ 25/30fps)		
	Bit Rate	H.264: 4kbps ~ 8192bps		
	Ethernet	RJ-45 (10/100Base-T)		
	Protocol	IPv4/IPv6, HTTP, HTTPS, TCP/IP, UDP, UPnP, ICMP, IGMP, RTSP, RTP,		
		SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS		
	Compatibility	ONVIF		

	Max. User Access	10 users		
	Smart Phone	iPhone, iPad, Android, Windows Phone		
	Power Supply	DC12V, PoE (802.3af)		
	Power Consumption	<5.5W(IR on)		
	Working Environment	-30°C~+60°C, Less than 95% RH		
	Waterproof Rating	IP66		
	Certifications	UL,CE,FCC		
	32 CH 32			
3.	32 CH NVR Network Video Recorder			
	Operating System	Embedded LINUX		
	Main Processor	Dual-core embedded processor		
	IP Camera Input	32 channel		
	Two-way Talk	1channel Input, 1channel Output, RCA		
	Interface	1 HDMI, 1 VGA, 1 TV		
	Resolution	1920× 1080, 1280× 1024, 1280× 720, 1024× 768		
	Display Split	1/4/8/9/16		
	OSD	Camera title, Time, Video loss,		

		Camera lock, Motion detection, Recording		
	Recording			
	Compression	H.264/MJPEG		
	Resolution	5Mp (2560× 1920)/3Mp(2048× 1536) /1080P(1920× 1080) / 720P(1280× 720)		
		/ D1 (704× 576/704× 480)&etc.		
	Record Rate	200Mbps		
	Bit Rate	48~ 8192kbps		
	Record Mode	Manual, Schedule(Regula r(Continuous), MD, Alarm), Stop		
	Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post- record: 10~300 sec		
	Trigger Events	Recording, PTZ, Tour, Alarm, Video Push, Email, FTP, Snapshot, Buzzer &		
		Screen tips		
	Video Detection	Motion Detection, MD Zones: 396(22× 18), Video Loss		

		& Camera Blank		
	Alarm Input	16 channel		
	Relay Output	4 channel		
	Playback & Backup			
	Sync Playback	1/4/9/16		
	Search Mode	Time/Date, Alarm, MD & Exact search (accurate to second), Smart search		
	Playback	Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next		
	Function	camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection,		
		Digital zoom		
	Backup Mode	USB Device/Network /Internal SATA burner/eSATA Device		
	Network			
	Ethernet	1 RJ-45 port (10/100/1000M bps)		
	Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP		

		Filter,		
		PPPOE, DDNS, FTP, alarm Server, IP search (Support IP Camera, DVR, NVS and etc.)		
	Max. User Access	128 users		
4.	4TB Hard Disk	WD/Seagate		
5.	Power Supply	1 2 V/2Amp		
6.	8 Port Switch Gigabit			
7.	Outdoor housing with mounting			
8.	16 Port Switch Gigabit			
9.	Cat-6 Twisted Pair Cable with connector (Molex)			
10.	Power Cable (ISI Mark)			
11.	NVR Rack			
12.	PVC Conduit Pipe with Assembly			
13.	Installation & laying Charges			