

**TECHNICAL SPECIFICATIONS FOR SUPPLY,
INSTALLATION AND MAINTENANCE OF NVR BASED CCTV SYSTEM**

The below mentioned specifications furnished are broad guidelines for the **CCTV** system on the tenderer's own design and manufactures standard system. Wherever the specifications are not furnished or specific, the specification shall be as per their respective UL standards as per the Bank's requirement and they shall not be diluted

TECHNICAL SPECIFICATIONS

Sl. No.	Items	Technical Parameter	Compliance
1.	Network Recorder (NVR) required Specifications Alone DVR	<ul style="list-style-type: none"> • Make: Hikvision/ Dahua or equivalent • 4 Channel NVR with 2 SATA slots with each slot supporting 6 TB Hard disk for 4 cameras • 8 Channel NVR with 2 SATA slots with each slot supporting 6 TB Hard disk for 8 IP cameras • 16 Channel NVR with 4 SATA slots with each slot supporting 6 TB Hard disk for 16 IP cameras • NVR should support Power over Ethernet (POE) for reduced cabling. • Should Support 2 way audio. • Should support third party camera • Should support recording from minimum 6 MP IP cameras or more. 	
2.	Hard Disk- Surveillance Grade	<ul style="list-style-type: none"> • Make : Seagate/WD or equivalent • 6 TB*2 disks with minimum 2 years warranty (Seagate/WD or equivalent). 	
3.	IP Camera- 2 MP- To be set at 15 FPS.	<ul style="list-style-type: none"> • Make: Hikvision/ Dahua or equivalent • 2 MP : 1/2" Progressive CMOS, ICR, Olux with IR, 1920/1080:25 fps (P)/30fps(N) H.265+/H.265/H.264/MJPEG, DC 12V & PoE, 3D DNR, BLC, IR range up to 50m, support on – board card slot –S: Audio/Alarm IO connectors 	
4.	Stand alone IP Camera	<ul style="list-style-type: none"> • Make: Hikvision/ Dahua or equivalent • 1/3" Progressive CMOS/ ICR/ Olux with IR/4mm@ F2.2 (1920/1080)/H.264/DC5V/DWDR/3D DNR/BLC/ Smart Motion Detection/ Smart Motion Tracking/ On-board Card Slot up 128 GB)/ built – microphone/ up to 10 m IR/Wi-fi with Software smart – config via mobile phone 	
5.	Network Switch for NVR and Cameras	Unmanaged POE 4/8/16, 100M Poe, 1 100M uplink port, 250m Transmission, 6 KV Surge Protection, 58W	
6.	Network cable	Cat 6 (T P Link) Cabling BIS certified	
7.	Micro SD Card/SD Card	64 GB Micro SD/SD Card (Class 10 UHS 3)	
8.	Monitor	Make : SAMSUNG /LG/Acer 17/24" TFT Monitor suitable for operation on 220 Voltage 50Hz power supply required CE/FCC Certified	

9.	Steel Cabinet/4 V Rack	Steel Box for keeping NVR System with dual key Godrej lock.	
10.	PVC Conduit	ISI mark PVC Conduit of medium grade with 20 mm dia will be used for laying Cat 6 cable	
11.	System should be robust and capable of working in 24x7 environments		
12.	System should support all make of cameras		
13.	System should be Scalable / upgradeable.		
14.	Support video signal loss alarm.		
15.	Should support Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop		
16.	Support playback in various modes fast, slow, pause, forward, backward, frame-by frame		
17.	Support IPv6, HTTPS, UPnP™, SNMP, NTP, SADP, SMTP, NFS, iSCSI, PPPoE, etc.		

Note :

1. Vendors are required to specify make and Model of all the equipments quoted for. Technical Literature/ brochures regarding the products should invariably be provided along with technical part of the bid. The specification given in Annexure IV is minimum requirement. Specification on the higher side is acceptable with minimum cost. Specification lower than the prescribed shall not be acceptable. Empanelment of vendors may be done on fulfillment of eligibility criteria and fulfillment of technical specification compliance.
2. All components of CCTV system should be compatible to each other.

Place:

Date:

Authorised Signatory