CCTV Department,

Shri Saibaba Sansthan Trust, Shirdi

SHRI SAIBABA SANSTHAN TRUST, SHIRDI.

At.Po.-Shirdi, Tal.- Rahata, Dist.- Ahmednagar – 423 109.

Phone No. (02423) 258867

(Website-www.sai.org.in email: cctv@sai.org.in)

Online tenders are invited for **Providing CCTV System at new Education Complex.**

The tender details will be available online for downloading & the tender has view only access on the Website of Trust -www.sai.org.in under tender menu.

    Tender Fee   -   Rs.18,000/-

    Earnest Money Deposit   -   Rs: 1,80,000/-

Online Tender Publish Date	Dt.19/09/ 2024	Time- 11.00
Online Bid Submission Start Date	Dt.19/09/2024	Time- 11.00
Online Bid Submission End Date	Dt.11/10/2024	Time- 17.00
Date of Pre-Bid Meeting and site visit	Dt.25/09/2024	Time- 11.00
Online Technical Bid Opening Date	Dt.15/10/ 2024	Time- 11.00

1. The details of Technical documents to be submitted online mentioned in the Tender documents. All such documents should be scanned and uploaded along with the e-tender.

2. Shri Saibaba Sansthan Trust, Shirdi reserves the right to reject any or all Tenders without assigning any reason thereof.

         (Goraksha Gadilkar, I.A.S.)

          Chief Executive Officer

       Shri Saibaba Sansthan Trust, Shirdi

Approved

(Goraksha Gadilkar, I.A.S.)

Chief Executive Officer

Shri Saibaba Sansthan Trust, Shirdi

SHRI SAIBABA SANSTHAN TRUST SHIRDI

CCTV Department

Tender document for Providing CCTV System

At New Education Complex.

CCTV DEPARTMENT

Po. Shirdi, Tal. Rahata, Dist. Ahmednagar.

Phone No. (02423)-258500

Website: - www.sai.org.in

DETAILED TENDER NOTICE
SHRI SAIBABA SANSTHAN TRUST
CCTV Department
Po. Shirdi, Tal.Rahata, Dist.Ahmednagar.
Phone No. (02423)-258867
Website: -www.sai.org.in
Providing CCTV System at New Education Complex

Online tenders are invited on for setup of Providing **CCTV System in New education Complex** from firm/company/authorized vendors. The tender details will be available on online for downloading.

1.0 Time Table for online tender submission online. –

Sr.NO	INFORMATION	DETAILS
1	Mode of Tendering	E-Tendering
2	E-Tendering Website	www.mahatenders.gov.in www.sai.org.in
3	Estimated Cost	Estimated price Rs. 80 Lakh+ tax depends on the CCTV solution provided
4	Tender Document Fee	**Rs. 18,000/-** (non-refundable) to be paid By Online
5	Earnest Money Deposit (EMD)	**Rs.1,80,000/-** to be paid By Online
6	Online E-Tender Publish	Dt. 19/09/2024
7	Last Date and Time for issue of Tender Document	Dt. 11/10/2024 (up to 5.00 pm)
8	Date of Pre-Bid Meeting and site visit.	Dt. 25/09/2024 at 11.00 a.m.at Sai sabhagruha (Meeting hall) SSST Shirdi,
9	Date and Time for Online submission of bids	Dt.19/09/2024
10	Date and Time for opening of Technical bid	Dt. 15/10/2024
11	Date and Time for opening Of Commercial bid	Will be communicated to the shortlisted bidders
12	Contact details	Department OF CCTV Shri Saibaba Sansthan Trust, Shirdi Tal:-Rahata, Dist.:-Ahmendnagar-423109 (M.S.) Contact No.:02423-258867/258934

Validity Period: The offer of the bidder shall remain valid for acceptance for a minimum period of **180 days** from the last date of tender

Scope of Work –

- **Bidder should visit the Site/Location on their own cost for better understanding of the project scope and identify proposed solution before submitting the Technical bid & Commercial bid.**

- Bidder has to ensure live viewing and recording of installed CCTV.

- Bidder has to provide manageable network solution for CCTV.

- Bidder has to ensure that Out-door cable should be Armored cable for both Fiber with HDPE pipe and Network cable (cat 6) with conduit outdoor & casing capping in side wherever is required.

- Bidder has to use weather proof outdoor wall mount rack, wherever is required.

- Bidder has to supply and install rack as per the solution requirement.

- Bidder has to deploy 2 Manpower as technician for five years FMS

- Bidder should supply all the items/devices/equipment's with mention brands only & 05 year comprehensive On-site warranty and 24 X 7 supports.

- Poles with outdoor/Gangbox, water proof box for poles underground blowing machine use for HDPE pipe/fiber cable/6 square mm service cable.

- One display should be provided to the all principle for monitoring the cameras on computer and computer will be provided by Sansthan.

Bidder Eligibility Criteria :-

1) Bidder must have Valid registration certificate. Must produce Registration/Incorporation Certificate.

2) Bidder should provide GST, PAN and produce relevant Certificates.

3) Bidder should have average turnover of Rs. 1(one) crore more during last three financial year i.e. 2023-24, 2022-23 & 2021-22. A CA Certificate with UDIN showing the turnover must be attached.

4) Bidder should have valid ISO 9001:2015, ISO 27001:2013 certificate. Must produce relevant certificates.

5) Bidder should have valid CMMi-3 or higher Certificate.

6) Bidder should have Supplied products in last two years in all items mentioned in BOQ (CCTV, UPS, LED Display). Must produce two work orders covering all items mentioned in BOQ.

7) Bidder should produce bid specific OEM authorization for all the OEMs.

8) Bidder should not be blacklisted during last three years by any Govt. / Semi Govt./Pvt. department. Must produce the undertaking.

9) Bidder should have at least single order of value not less than 70 lacs for any of the above stated category. Must produce copy of work order bidder without work order 70 lacs will be rejected.

10) Bidder should produce data compliance sheet from all OEM with confirmation.

11) The quantities mentioned in the tender document is indicative and it may vary on the basis of designing & requirement, bidder has to give final /exact quantity after that bidder has to quote the final commercial. Afterword due to any reasons the any price hike will not consider. All CAT 6 cables having casing-capping and outdoor CAT 6 cables have conduit pipe. HDPE pipe is use for fiber cable only.

2.0 Earnest Money Deposit& Security Deposit:

- **Earnest Money Deposit (EMD) Rs: 1,80,000/-**

- EMD of all unsuccessful bidders would be refunded by Department after award contract to L1 successful bidder.

- The EMD amount is interest free and will be refundable to the unsuccessful bidders without any accrued interest on it.

- The bid submitted without EMD, will be summarily rejected.

- Even though the bidders meet the requirements, they are subject to be disqualified in any case of misleading or false representations in the forms, statements and attachments submitted as proof of the qualification requirements.

- The EMD may be forfeited:
    - If bidder withdraw the bid during the period of bid validity.
    - In case of a successful bidder, if the bidder fails to implement CCTV System at New Education Complex in accordance with the Shri Saibaba Sansthan requirements.
    - The price quoted should be inclusive of all taxes & F.O.R. SHIRDI

- **Security Deposit (SD):**
    A) Successful bidder has to deposit **3%** amount of awarded cost as security deposit within 30 days from acceptance of purchase order. The SD amount will be refunded after five years warranty period & FMS.
    B) SSST GST number as well as supplier GST number must be mentioned on invoices.
    C) Successful bidder must pay GST amount against invoice submitted to SSST, it should reflect on GST Portal, otherwise SSST will not proceed any invoice for Payment.

3.0 TENDERING PROCEDURE.

3.1 Technical Bid -

- Technical BID must be submit online only.

- Scanned copy of following documents must be uploaded as a Technical-bid.

1. Certificate of GST Registration and PAN.
2. Letter stating that the Firm/Company is not blacklisted by Central / State Government, Government Corporation, statutory Institute.
3. Letter on company/Firm letterhead Stating that "Company/Firm have read all terms and conditions and agree with them"
4. Letter from bidder company to give declaration to provide 5 (five) year comprehensive onsite warranty to all solutions/setup (including all software/hardware etc) CCTV System at New education complex with two technician onsite for five years.
5. Fill and upload the 'Annexure'.
6. Attested xerox copy of ISO 9001 : 2015, ISO 27001 : 2015 Certificate copy with attached.
7. Attested & certify xerox copy of work order at 70 Lacs in CCTV.
8. Bidder should have average turnover of Rs. 1(one) crore more during last three financial year i.e. 2023-24, 2022-23 & 2021-22. A CA Certificate with UDIN showing the turnover must be attached.
9. OEM authorisation letter for bidder.
10. Undertaking of eligibility criteria for CCTV OEM and for switches on bidder letter pad.
11. Xerox copy of CMMi-3 level or higher Certificate.

3.2 Commercial Bid

1. Price of all items should be inclusive of all Tax & F.O.R. Shirdi.
2. In future, if there is change in GST then it will be made applicable from the date of notification.
3. CCTV System bidder has to Supply, installation of CCTV system, laying at cable & HDPE pipes testing and commission of all setup as per SSST expectations. If successful bidder refuses or fails to deliver the solution/project/items or any items or fails to the implement, EMD and SD will be forfeited and bidder will be blacklisted for 3 years.
4. Bidder has to mention in details all items (software, hardware, or any other items) any missing items in BOQ is bidder responsibility and SSST will not make payment to missing item in BOQ.
5. Final offer should be inclusive of all items needed to complete the solution with five years comprehensive onsite warranty and two technician onsite.
6. The bidder should give design & details BOQ and quote the best rate online.
7. During implementation phase, any increase/missing BOQ item will be allow in implementation phase but price hike in final quote is not allowed.

3.3 Acceptance of Tender:

1. The commercial bid of technically qualified bidders shall be only open online and amongst the opened bid L1 will be accepted. The acceptance of tender will be communicated to the bidder by email/phone.
2. The quoted amount in online tender shall be valid for 180 days (Six Months) from the last date of the tender.

3.4 Project Implementation : -

1. All cable of CAT 6 (indoor) must used casing-capping and outside CAT 6 outdoor cable must used conduit pipes only.
2. All fiber cable must have HDPE pipe with clamping, sliding & undergrounding as per requirement of the project.
3. The outside campus, Three PTZ camera must use underground blowing machine for HDPE pipe/fiber cable/6mm service cable. PTZ are on roadside, having a 500 meters distance approximately from each other.
4. All rack & LIU must be full loaded.
5. Switch IP configuration as per Sansthan requirement.
6. Five PTZ camera with 21 feet height of pole with concrete base. The gang/ outdoor box for pole include at SPF module 6 mm 2 core panel cable from main server room.
7. Sansthan will not provide any accommodation, food etc to the bidder has to be manage the bidder only.
8. Bidder has to follow the best and optimum workmanship on project site.

3.5 Facility management services (FMS) & Warranty Period.

1. Bidder has to give 5 (five) years comprehensive onsite warranty to all solutions/setup (including all software/hardware etc) and two onsite technicians for five years from date acceptance.
2. Bidder should provide 24X7 online supports within warranty period & FMS and should help our representative to log the call with bidder.
3. If supplier fails to resolve the issue in 12 hours working hours Rs.1000 per issue/per day will be deducted from security deposit or payment until the issue is resolved.
4. Yearly police verification of two technician's onsite is needed & mandatory to bidder.
5. The bidder has to provide stand by equipment's for the project. Bidder has to provide all working tools needed to technicians.

6. FMS include of shifting of camera, relocating of camera, cleaning of camera (after every 15 days), replacement of spare parts/ camera /all type cables/NVR etc. are bidders responsibility.

7. NVR data protection is the bidder responsibility. Data recovery and Data loss should be protector by the bidder.

4.0 Payments :

- 10 % - On satisfactory checking & Inspection of material and devices on site.
- 50% - On successful Installation/configuration, inspection & satisfactory acceptance of SSST (Shri Saibaba Sansthan Trust) of all solution.
- 40% - On FMS (support period of five years) - The remaining payment will be divided equally for five years and every 03 months payment will be made.
- No advance payment will be paid in any case.

4. 1 Penalty:

a) If Bidder/Supplier fails to deliver/install within stipulated time, EMD &SD will be forfeited.

b) If successful bidder refuses to deliver and implement the solution or fails to implement, EMD will be forfeited and bidder will be blacklisted for 3 years.

c) If supplier fails to resolve the issue in 12 working hours, Rs.1000 per issue/per day will be deducted from security deposit or payment of FMS until the issue is resolved.

5. Terms and Conditions:

1. Device/Software license registration (if any) should be done in the name of "Chief Executive Officer, Shri Saibaba Sansthan Trust, Shirdi" & all invoices should be done in the same name.

2. The bidder should study all the tender documents & site survey carefully and understand the tender contract conditions, specifications, brands etc. before quoting the commercial online.

3. Each page of the tender document must be signed & approved sign by the authorized person/persons submitting the tender. In technical bid, sign document needed to be uploaded.

4. Shri Saibaba Sansthan Trust reserves the rights to accept / reject partial / full tender at any stage of tender or during implementation phase of said project.

5. Bidder should have toll free no for call log. Should produce undertaking with toll free no.

6. Bidder must provide the tool for call log.

7. All tenderers must disclose the names of their partners, if any in the particular contract.

(A) Firms with common proprietor /partner or connected with one another either financially or as principal and agent or as master and servant or with proprietor /partner closely related to each other such as husband, wife father /mother and son/daughter and brother /sister shall not tender separately under different names for the same contract.

(B) If it is found that firms as described in **clause 'A'** have tendered separately under different names for the same contract, all such tender (s) shall stand rejected and tender deposit of each such firm/establishment shall be forfeited. In addition such firms/establishment shall be liable, at the sole discretion of the Chief Executive Officer for further penal action including blacklisting.

(C) If it is found that closely related persons as in **Clouse 'A'** have submitted separate tenders/quotations under different names firms /establishment but with common address for such establishment/firms and /or in such establishment /firms though they have different addresses, are managed or governed by the same person / persons jointly or severally, such tenderers shall be liable for action as in **clause 'B'** including similar action against the firms/ establishments concerned.

6. Delivery Schedule

1. Successful bidder should supply the items mentioned in the BOQ and the solution project within 60 days from the purchase order.
2. Delivery to be done at New Education complex, Shri Saibaba Sansthan Trust, Shirdi on working day between 10 am to 5 pm.
3. Transport, freight and other charges Travel & Theft, act of god etc are bidder responsibility. Bidder has to take insurance of theft, loss of property etc. till site/project handover/acceptance to Shri Saibaba Sansthan.

7. List of brand approved for this project :-

- **Product – CCTV Camera.**
  Brands:- CP PLUS, BOSCH, SONY SAMSUNG, ZICOM, DAHUA,
- **Product - NVR**
  Brands:- CP PLUS, BOSCH, SONY SAMSUNG, HONEYWELL , PANASONIC, DAHUA
- **Product -Display Panel**
  Brands:- LG, SA
  M0SUNG
- **Product – PoE Switch**
  Brands:- DLINK, CP PLUS, NETGEAR HP, CISCO, TP-LINK.
- **Product – Layer 2 Switch**
  Brands:- DLINK, CP PLUS, NETGEAR HP, CISCO, TP-LINK
- **Product – UPS**
  Brands:- NUMERIC, VERTIVE, APC

ANNEXURE- A

Details

(Submit on Company Letter Head)

Sr. No.	Personal Detail	
1	Name of the Firm	
2	Address	
3	Contact Person and Cell No.	
4	GST Number	
5	Bank Details –	
	Name of the Bank	
	Bank City	
	Branch Name and Code	
	Account Type	
	Account Number	
	IFSC CODE	
	MICR NO.	
6	Stamp and Signature of the agency	

All columns are mandatory

Sign & Stamp at Bidder

Annexure B
Details Indicative BOQ format - Technical Bid

S.No	Details	Qty	Unit	Brand
1	64 Ch NVR with 08 hard disk slot with wireless mouse	5	Nos	
2	5MP IP Camera	252	Nos	
3	25x PTZ Camera	6	Nos	
4	24 port POE switch Giga L2 Manageable	14	Nos	
5	08 Port POE Switch Giga L2 Manageable	4	Nos	
6	Fibre Switch 24 Port L2 Manageable with 18 fibre slot and 08 CAT slot.	1	Nos	
7	Wall Mount 9U Rack with Fan, Tray & PDU for Switch	18	Nos	
8	Floor Mount 42U Rack for NVR Fibre Switch along with two 48 Port LIU and one 24 port LIU full loaded with accessories	1	Nos	
9	8TB Surveillance HDD for 30 day Recording	36	Nos	
10	1 Gig SFP Module	36	Nos	
11	Ethernet SFP	11	Nos	
12	Indoor Cat 6 Cable	50	Box	
13	6 core armoured optical Fibre SM	7000	Mtr	
14	PVC box for Camera	252	Nos	
15	Outdoor CAT 6 cable	10	Box	
16	Conduit Pipe and casing capping - Installation with clamps & crews	5000	Mtr	
17	Conduit Pipe n casing capping Patti (as per actual)	5000	Mtr	
18	HDPE Pipe for fibre cable (as per actual) with clamping and underground clamps & crews	7000	Mtr	
19	5/6KVA or Higher UPS with 30 Min Backup	1	Nos	
20	1 KVA UPS with inbuilt Battery with at-least 30 Mins Backup	18	Nos	
21	55" Display for CCTV	4	Nos	
22	Comprehensive Maintenance Contract on site.	5	Years	
23	Camera housing if required	100	Nos	
24	2 Engineer onsite general duty -	5	Years	
25	Installation and project management charges including dressing with clamping and underground pipe & cable.	Lumpsum		
26	Fiber patch cord	36	Nos	
27	48 port LIU full loaded (server side) with adaptor and pigtails.	02	Nos	
28	24 port LIU full loaded (server side) with adaptor and pigtails.	01	Nos	
29	06 port LIU full loaded (Rack side) with adaptor and pigtails.	18	Nos	
30	Pole – 7 meters high standard octagonal galvanized pole with minimum 86 micron coating for PTZ, all poles shall be provided with fixed camera brackets and similar pole material, IP 66 weather proof outdoor junction box.	05	Nos	
31	RJ 45 connecter (as per requirement)	530	Nos	
32	Fibre cutting and splicing (as per requirement)	---	---	
33	6 sq. 3 core aluminium service cable (power cable)	3200	Mtr	
34	Gang \ outdoor box for pole PTZ camera	05	Nos	
Note: All the product should be supplied with 5 year OEM warranty Onsite.				

Date:

Sign of bidder.

Note:-

1) Fill-up the Rates in BOQ provided online .
2) Technical and Commercial Bid to be submitted online only. No physical Bid shall be accepted.
3) The relevant quotation is for aggregate cost but for the cables, pipes and other ancillary materials will be billed on actual usage basis.
4) The materials of the brand mentioned in the technical bid and tender will be as per above mention brand only otherwise the materials of other brands or non-brand will not be accepted and will be rejected.
5) Above BOQ-Technical Bid Passive Material Location will be increased/decreased as per Bidder design .
6) Bidder has to select brand as per **List of brand approved for this project. Bidder has to select only one brand for each item as mentioned. If bidder fails to give brand or give multiple brand for single item or out- of- brand list brand mentioned then the bidder tender shall be rejected.**

Annexure C
Compliance Sheet for technical Document

Sr. No.	Tender Requirement.	Document uploaded in Online Bid.
1	Scan of copy Pan	
2	Letter stating that the Firm/Company is not blacklisted by Central / Stat Government, Government Corporation, statutory Institute. (On letter head of Firm)	
3	Solution & peripherals or Devices related white papers/Pamphlets/Brochure along with model number and specification in comparison with requested model.	
4	Letter stating that Firm/Company has read all terms& conditions, and agreed with them. (On letter head of Firm)	
5	Undertaking of bidder for 5 year on sitewarranty and letter from Bidder for providing 5 Year two technician onside form Date of at Expectance	
6	Scan copy of GST certification/registration	
7	Certificate registration of company /firm/dealership etc.	
8	Xerox Copy of ISO 9001 : 2015, ISO 27001:2013 certificate	
9	Xerox copy of work order of Rs.70 lacs or more in CCTV.	
10	Xerox copy of last three year balance sheet.	
11	OEM authorisation letter from brands mentioned in BOQ.	
12	Undertaking of bidder for OEM for qualifying min. eligibility criteria for CCTV OEM and for the switches.	
13	Final BOQ of bidder with mentioned brands	
14	Xerox copy of CMMi-3 level or higher Certificate.	

Note : All bidder undertaking and final BOQ on letter pad of bidder.

Commercial format

Sr. No.	Solution based Project.	Qty.	Price inclusive of all taxes(in lump sum)
1	Providing CCTV System project at New Education complex with five years On-site OEM warranty and two technicians for 60 months (form date at acceptance).	1	Online

Minimum Technical Specification

PANEL	
Panel	
Brand ; - (Brand LG & Samsung)	
Screen Size	55''
Backlight Type	Slim DLED
Brightness (typical)	500 cd/m^2
Native Resolution	3840 x 2160 (16:9) - UHD
Contrast Ratio (typical)	1200:1(typ.)
Dynamic Contrast Ratio	50000:1
Panel Life Time (Min.)	50000 Hrs
Response Time (typical)	8ms
Active Area (H x V)	1209.6 × 680.4
Viewing Angle	178° Vert., 178° Hor. (89U/89D/89L/89R) @ CR>10
Color Value	1.07 G (8 bit + FRC)
Screen Treatment	3H
Haze Level	1%
Refresh Rate	60Hz
Orientation	Landscape / Portrait
Operation Hours	24 / 7
Area of Usage	Indoor
Built-in System	
Mainboard Model	17MB135VS
Monitor Connectivity	
RGB Input	VGA(DE-15F)
RGB Output	N/A
Video Input	4xHDMI2.0, 2xUSB2.0, USB2.0(Internal)
Video Output	HDMI2.0
Audio Input	Line In L/R
Audio Output	Headphone, Optic SPDIF
External Control	RS232(DE-9F), Ethernet(RJ45), Service(RJ12)
External Sensor	RJ12
Mechanical	
Product Dimensions (WxDxH)	1236 x 63 x 709 mm OPS Area depth: 83 mm
Package Dimensions (WxDxH)	1369 x 165 x 874
Product Weight	17 kg
Package Weight	22 kg

Vesa Mounting	400 mm(W) x 400 mm(H) M6
Bezel Width	9/9/9/11 mm
Environmental Conditions	
Operating Temperature	0-40°C
Operating Humidity	10-90%
Power	
Power Supply	110 VAC - 240 VAC - 50/60 Hz
Power Consumption	
Typical	144 W
Deep Standby	≤0.5 W
Features	
Main Features	Open Content Management Support, Scheduler, USB-Autoplay, Auto-Launch, HDMI-CEC, HDMI-Wakeup, Auto-switch on Failover, Panel Lock, OSD Rotation, NoSignalPowerOff, Screen Saver, Pixel shift, Scheduler, Videowall support, Remote control via LAN, Real Time Clock
Mechanical Features	Joystick, Rocker Switch, Detachable Power Cable, Dettachable Logo, Internal Usb Cover, 30-degrees Tilting Installation, Overlay Touch Kit Compatibility
Optional Features	SDM or OPS compatibility, Embedded IR, IR extender option
Speaker	2x10 W
Accessory	
Standard	QSG, IB, Power cord, Remote control unit, RC battery, Mounting kit, IR extender cable
Certification	
Safety	Yes
EMC	Yes
CE	Yes

BULLET CAMERA BRAND & SPECS

Bullet Camera	
Brand ; CP PLUS. ZICOM. SAMSUNG. SONY. BOSCH. DAHUA	
Image Sensor	1/2.7" 5MP Progressive scan CMOS (0.9407cm)
Minimum Illumination	0.008 Lux@F1.6
Effective Pixels	2592 (H) × 1944 (V)
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Lens	3.6mm (2.8mm Optional)
Gain Control (AGC)	Auto/Manual
Video Compression	Instastream/H.265/H.264+/H.264/ H.264B/ MJPEG
Angle of View	3.6mm: Horizontal: 84° Vertical: 58° Diagonal: 110° 2.8mm: Horizontal:103° Vertical: 71° Diagonal: 132°
Back Light Compensation	BLC / HLC / WDR(120dB)
Video Streaming	Main Stream: 2592 × 1944 (1 fps-20 fps) 2688 × 1520 (1 fps-25/30 fps) Sub Stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)
Resolution	2592×1944(2592×1944); 2688×1520(2688×1520); 3MP(2048×1536); 2304×1296(2304×1296); 1080P(1920×1080); 1.3MP (1280 × 960); 720P(1280×720); D1(704× 576/704×480); VGA(640×480); CIF(352×288/352×240)
Motion Detection	OFF/ON (4 areas, rectangular)
Privacy Mask	4 areas

ICR	Auto(ICR)/Color/B/W
ROI	Yes (4 areas)
Bit Rate	H.264: 32Kbps ~ 8192Kbps H.265: 12Kbps ~ 8192Kbps
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour, ONVIF (Profile S/Profile G/Profile T); CGI; InstaOn; Milestone; Genetec
Smart Detection	Tripwire, Intrusion
Ethernet	RJ-45 (10/100Base-T)
Event Trigger	Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
User Account	20 Users
IR	IR Range of 30 Mtr.
Smart Phone	iPhone, iPad, Android Phone
Micro SD	FTP; Micro SD Card (support max. 512GB); NAS; SFTP
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Humidity	≤95%
Power Source	DC12V,PoE (802.3af)
Power Consumption	< 5.6W
Weatherproof Standard	IP67
Casing	Metal

PTZ CAMERA

PTZ Camera	
• **Brand ;** CP PLUS. ZICOM. SAMSUNG. SONY. BOSCH. DAHUA	
Image Sensor	1/2.8" 2MP PS CMOS (0.9071 centimeters)
Effective Pixels	1920(H) x 1080(V), 2 Megapixels
Resolution	2MP
S/N Ratio	More than 50dB
Minimum Illumination	Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6; 0Lux@F1.6 (IR on)
Focal Length	4.8mm~120mm
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Max Aperture	F1.6 ~ F4.4
Focus Control	Auto / Manual
Close Focus Distance	100mm~ 1000mm
Angle of View	H: 62.8° ~ 2.6°
Iris	Auto/Manual
DORI Distance	1613m(Detect) 646m (Observe) 323m (Recognize) 161m (Identify)
AGC Control	Auto / Manual
Back Light Compensation	BLC / HLC / WDR(120dB)
ROI	Support
Motion Detection	Support
Optical Zoom	25X
Shutter Speed	1/1s~1/30,000s
Digital Zoom	16x

Pan Travel	0°~360° endless, Pan Speed: 0.1° ~ 200°/sec
Tilt Travel	-15° ~ 90° auto flip 180°, Tilt Speed: 0.1° ~120°/sec
Manual Speed	Pan: 0.1° ~200° /s; Tilt: 0.1° ~120° /s
Presets	300
Preset Speed	Pan: 240° /s; Tilt: 200° /s
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Day/Night: IR Cut Filter	Auto(ICR) / Color / B/W
Video Compression	H.265+/H.265/H.264+/H.264
Event Trigger	Motion detection, Video tampering, Network disconnection, IP address conflict, Illegal access, Storage anomaly
Video Streaming	Main stream: 1080P/720P(1 ~ 25/30fps) Sub stream1: D1/CIF(1 ~ 25/30fps) Sub stream2: 720P/D1/CIF(1 ~ 25/30fps)
Audio Compression	G.711a/G.711Mu/G.726/AAC
Special Features	IR Range upto 100m, Defog, Up to 300 Presets, 5 Pattern, 8 Tour, Auto Pan , Auto Scan
Audio Streaming	1/1 channel In/Out
Smart Detection	Tripwire, Intrusion, Abandoned/Missing, Face Detection
Networking	RJ-45 (10/100Base-T)
IVS	Tripwire, Intrusion,Abandoned/Missing, Face Detection
Protocols	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, ONVIF Profile S&G, API
Alarm	2/1 channel In/Out
IR Range	100 Mtr.
Operating Temperature	-40ºC ~ 70ºC / Less than 95% RH
Smart Phone	iPhone, iPad, Android Phone
Memory Slot	Micro SD card 256GB
Weatherproof Standard	IP66
Dimension	Φ160(mm) x 295(mm)
Power Source	DC 12V/3A, PoE+ (802.3at)
Power Consumption	13W, 22W (IR on)

NVR

NVR	
Brand ;	CP PLUS. Honeywell SAMSUNG. Panasonic. DAHUA
Processor	Quad-core embedded processor
Operating System	Embedded LINUX
Two-way Talk	1 Channel Input, 2 Channel Output, RCA
User Interface	GUI
Video Output	2 HDMI, 2 VGA
Video Resolution	HDMI1: 3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768 VGA1: 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768 ; HDMI2/VGA2: 1920 × 1080
Video Recording	Max 320Mbps
Video Display Split	1st screen: 1/4/8/9/16/25/36/64 , 2nd screen: 1/4/8/9/16
Channel	64 channel
Motion Detection	MD Zones: 396(22×18).

Video Loss	Supports
Bandwidth Incoming	320Mbps
Alarm Input	16 Channel
Alarm Output	6 Channel
Smart Phone	iPhone, iPad, Android Phone
Hard Disk	8 SATA ports, up to 10TB Each,
Trigger Events	Recording, PTZ, Tour, Alarm Out, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Recording Mode	Manual, Schedule (Regular, MD (Motion Detection) , Alarm, IVS), Stop
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
Backup Mode	USB Device/Network/eSATA Device
Playback	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom
Max User Account	128 users
Record Interval	1~120 min (default: 60 min), Pre-record: 1~30 sec, Post-record: 10~300 sec
Ethernet	2 RJ-45 Ports (10/100/1000Mbps) Independent or Joint Working
Interface Ports	3 USB Ports (2 Rear USB 3.0, 1 Front USB 2.0), 1 RS232, 1 RS485
Protocols	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search , ONVIF 2.4, SDK, CGI
Power Supply	Single, AC 100~240V, 50/60 Hz
Power Consumption	<16.7W (without HDD)
Working Temp	-10 ~+55°C / 10~90%RH / 86~106kpa

PoE Switch

S.N	PoE Switch Desired Specification/Qualitative Requirement
	Brand Cisco CP Plus D-Link TP-Link. Netgear HP
1.0	**Edge Switch**
1.1	**Architecture**
(a)	Switch shall be with 8 x 10/100/1000 Mbps PoE capable ports and 2 SFP Ports
1.2	**Network Media**
(a)	SFP's 1000BaseSX,1000BaseLX,1000BaseTX
1.3	**Performance**
(a)	The Switch shall have Non-blocking wire speed switch fabric
(b)	The Switch shall have Min. 20 Gbps Back plane or higher
(c)	The Switch shall have Min. 14 million pps or higher
(d)	The Switch shall support Min. 8K Mac address
(e)	The Switch shall support Min. 256 VLANs
(f)	The L2 Switch should have MTBF for 205,249 hours.
(g)	The Switch Should support Jumbo Frame (up to 10000 Bytes)
1.4	**Layer 2 Features**
(a)	The Switch should have IGMP Snooping v1,v2
(b)	The Switch should have Spanning tree 802.1d
(c)	The Switch should have 802.3ad Link Aggregation Up to 5 groups per device
(d)	The Switch should have Port Mirroring One to one/Many to One
(e)	The L2 Switch shall have power saving feature which can automatically powers down ports that have no link or link partner.
(f)	The L2 Switch shall not consume more than 78 Watts of Power and should support PoE Standard 802.3af & 802.3at
1.5	**VLAN**
(a)	The LAN switch shall have IEEE 802.1Q VLAN encapsulation. Up to 255 VLANs per switch.

S.N	PoE Switch Desired Specification/Qualitative Requirement
	Brand Cisco CP Plus D-Link TP-Link. Netgear HP
(b)	It shall have Management VLAN
(c)	It shall have Asymmetric VLAN
(d)	It shall have Auto Voice VLAN
1.6	**Quality of Service**
(a)	It shall support 802.1p Priority Queues (4 Queues)
(b)	Queue Handling mode: WRR & Strict Mode
(c)	Class of service shall be based on DSCP,802.1p queues
1.7	**Network Security**
(a)	The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security up to 64 MAC Addresses per port, providing user authentication.
(b)	It shall support DHCP Server Screening
(c)	It shall have built in mechanism to protect the switch against traffic flooding caused by virus attack
1.8	**Management**
(a)	It shall support Firmware upgrade through Web Management or through software must come along with Switch to reduce the cost of administering software upgrades by downloading from a centralized location.
(b)	It shall support Network Timing Protocol (NTP/SNTP) to provide an accurate and consistent timestamp to all intranet switches.
(c)	It shall support SNMPv1 to deliver comprehensive in-band management
(d)	It shall support LLDP, LLDP-MED &Time based POE.
1.9	Certification
(a)	Switch should be CE,FCC,UL,VCCI, ERTL certified
(b)	Switch should be functionally test and verified from ERTL and vendor need to present complete functional test report from ERTL.
(C)	OEM should be listed in latest Gartner Report

SN	PoE Switch -Desired Specification/Qualitative Requirement
1.0	**Edge Switch**
1.1	**Architecture**
(a)	Switch shall be with 24 10/100/1000 Mbps PoE capable ports and 4 SFP Ports
1.2	**Network Media**
(a)	SFP's 1000BaseSX,1000BaseLX,1000BaseTX
1.3	**Performance**
(a)	The Switch shall have Non-blocking wire speed switch fabric
(b)	The Switch shall have Min. 56 Gbps Back plane or higher
(c)	The Switch shall have Min. 41 million pps or higher
(d)	The Switch shall support Min. 8K Mac address
(e)	The Switch shall support Min. 256 VLANs
(f)	The L2 Switch should have MTBF for 205,249 hours.
(g)	The Switch Should support Jumbo Frame (up to 10000 Bytes)
1.4	**Layer 2 Features**
(a)	The Switch should have IGMP Snooping v1,v2
(b)	The Switch should have Spanning tree 802.1d
(c)	The Switch should have 802.3ad Link Aggregation Up to 5 groups per device
(d)	The Switch should have Port Mirroring One to one/Many to One
(e)	The L2 Switch shall have power saving feature which can automatically powers down ports that have no link or link partner.
(f)	The L2 Switch shall not consume more than 78 Watts of Power.
1.5	**VLAN**
(a)	The LAN switch shall have IEEE 802.1Q VLAN encapsulation. Up to 255 VLANs per switch.
(b)	It shall have Management Vlan
(c)	It shall have Asymmetric Vlan
(d)	It shall have Auto Voice Vlan
1.6	**Quality of Service**
(a)	It shall support 802.1p Priority Queues (4 Queues)

SN	PoE Switch -Desired Specification/Qualitative Requirement
(b)	Queue Handling mode: WRR & Strict Mode
(c)	Class of service shall be based on DSCP,802.1p queues
1.7	**Network Security**
(a)	The LAN switch shall support IEEE 802.1x to allow dynamic, port-based security up to 64 MAC Addresses per port, providing user authentication.
(b)	It shall support DHCP Server Screening
(c)	It shall have built in mechanism to protect the switch against traffic flooding caused by virus attack
1.8	**Management**
(a)	It shall support Firmware upgrade through Web Management or through software must come along with Switch to reduce the cost of administering software upgrades by downloading from a centralized location.
(b)	It shall support Network Timing Protocol (NTP/SNTP) to provide an accurate and consistent timestamp to all intranet switches.
(c)	It shall support SNMPv1 to deliver comprehensive in-band management
(d)	It shall support LLDP, LLDP-MED &Time based POE.
1.9	**Certification**
(a)	Switch should be CE,FCC,UL,VCCI, ERTL certified
(b)	Switch should be functionally test and verified from ERTL and vendor need to present complete functional test report from ERTL.
1.10	**POE Features**
(a)	Should support IEEE802.3at and IEE802.3af POE
(b)	PoE Power Budget: 193W

LAYER 2 MANAGEABLE GIGABIT SWITCH

Layer 2 Manageable Gigabit Switch
Brand ; Cisco CP Plus D-Link TP-Link. Netgear HP
Architecture
L2 Stackable Managed Switch which has 24 Optical (SFP) Ports in addition with 2 Gigabit SFP ports + 2 x 10G SFP+ ports
Switch should have Min. 128 MB SD RAM & 16 MB Flash Memory
Performance
The Switch should have Non-blocking wire speed switch fabric
The Switch should have Min. 90 Gbps Back plane or more
The Switch should have Min. 65 Mpps or more
The switch support 1.5 MB or more packet buffer memory for Non-blocking architecture
The Switch should support Min. 16K Mac address or more
The Switch should support Min. 4K VLANs
The Switch should support physical stacking of 6 units or more and virtual Stacking up to 16 units or more.
The Switch Should support Jumbo Frame (up to 10K)
The switch should support redundant power supply
Layer 2 Features
The Switch should have IGMP Snooping v1,v2 & Per VLAN IGMP snooping
The Switch should have Spanning tree 802.1d,802.1w,802.1s
The Switch should have 802.3ad Link Aggregation Up to 30 groups per device
The Switch should have Port Mirroring One to one/Many to One &Mirroring for Tx/Rx/Both.
The Switch should have the intelligence to detect the loop occurring from the unmanaged network segment
It should support LLDP and LLDP-MED
L3 Features
It should support IP interfaces and static routes, default routes
It should supportIPv6 Neighbour Discovery

VLAN
The LAN switch should have IEEE 802.1Q VLAN encapsulation. Up to 4k VLANs groups per switch and up to 4000 VLAN IDs.
It should have Automatic Negotiation for port configuration, to help minimize the configuration & errors.
It should have centralized VLAN Management. VLANs created on the Core Switches should be propagated to all the others switches automatically, thus reducing the overhead of creating/modifying/deleting VLANs in all the switches in turn eliminating the configuration errors & troubleshooting.
Quality of Service
It should support 802.1p Priority Queues (4 Queues)
Queue Handling mode: WRR & Strict Mode
Granular Rate Limiting functions on per port & flow based to guarantee bandwidth in increments should be as low as 64 Kilobits per Second for ingress and egress
Class of service should be based on Switch port, DSCP, VlanID,TCP/UDP port, Protocol type,802.1p queues, IPv4/v6 address, IPv6 flow label.
Access Control List
The LAN Switch should have the capability to support access list based on IPv4/v6 address, MAC address Ethernet Type, IPv4 address, ICMP, IGMP, TCP/UDP port number, 802.1p, DSCP
The Switch should support up to 200 Access Control Entries minimum
Network Security
The LAN switch should support IEEE 802.1x to allow dynamic, port-based, Host based security, providing user authentication.
It should support for SSHv2, SNMPv3; SNMP over IPv6 to provide network security by encrypting administrator traffic during Telnet and SNMP sessions.
It should support ; Local database ;RADIUS authentication ; TACACS; TACACS+
It should support DHCP snooping and to allow administrators to ensure consistent mapping of IP to MAC addresses.
It should support DHCP relay option 82
It should support port security to secure the access to an access or trunk port based on MAC address. After a specific timeframe, the aging feature should remove the MAC address from the switch to allow another device to connect to the same port.
It should have MAC-IP-Port binding up to 500 Entries per device
It should have CPU Filtering to protect the CPU from Broadcast / Multicast / Unicast flooding & protocol control packets attacks
Management
The LAN switch should have CLI support to provide a common user interface using telnet, ssh using IPv4 and IPv6,Switch also support WEB GUI configuration using IPv4 and IPv6
It should have RMON software agent to support four RMON groups for enhanced traffic management, monitoring and analysis.
It should support TFTP to reduce the cost of administering software upgrades by downloading from a centralized location.
It should support Network Timing Protocol (NTP/SNTP) to provide an accurate and consistent timestamp to all intranet switches.
It should provide management functions for network segments (access links and individual circuits), monitors individual links.
It should support configuration rollback to replace current configuration with any saved configuration file.
Switch should consume less power through auto-detection of link status and cable length.
Switch support tftp over IPv6, snmp over IPv6,sntp over IPv6, SSL over ipv6,Radius over IPv6.
Physical & Environment
It should support the operating temperature up to 0-50°C and can be operated in 10% -90 % RH
Certification -- FCC Class A, CE Class A, ICES-003, VCCI Class A, C-Tick, cUL, LVD
OEM of proposed Switch should have been listed in Gartner Report for Wired & Wireless Infrastructure

	SFP- MINIMUM TECHNICAL SPECS
Features	• It should support1000BASE-LX port single mode fiber (IEEE 802.3z standard) • It should support 10 km • It should be Duplex LC connector • Full duplex operation • 802.3x flow control support • Fiber type: 9um single-mode fiber up to 10 km • Wave length: 1310nm • Power support: 3.3V • Power budget: 10.5dB • Hot pluggable • Class 1 laser product complies • TTL signal detect indicator • Metal enclosure for lower EMI • 1000Base-T Copper SFP Transceiver
Certification	SFP Transceiver should be CE,FCC,UL,VCCI, ERTL certified which should be functionally test and verified from ERTL and vendor need to present complete functional test report from ERTL or transceivers same form the switch OEM

Ethernet SFP
1000Base-T Copper SFP Transceiver

OEM Eligibility Criteria for Switches.
OEM Should have International certification for the ISO 45001 Health and Safety Management System, Information Security Management System: ISO 27001, ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 14064-1 Greenhouse Gas Inventory Standards.
OEM Should be in India from last 25 Years and should be registered on NSE and BSE
OEM should have Indian based operation at least for a period of 25+ years and should have an Annual Turnover of Rs. 600 Crores and above in any of last three consecutive Audited Financial years. (To ensure only principal networking companies participate having strong Product , Support and Service.)
All Active Should be from the same OEM.
OEM Eligibility Criteria for Passive Components
OEM Should be International certification for the ISO 45001 Health and Safety Management System, ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 14064-1 Greenhouse Gas Inventory Standards.
OEM Should be in India from last 25 Years and should be registered on NSE and BSE
After successful installation, testing and commission, OEM should provide 25 Years Performance warranty with site certification
OEM should have Indian based operation at least for a period of 25+ years and should have an Annual Turnover of Rs. 600 Crores and above in any of last three consecutive Audited Financial years. (To ensure only principal networking companies participate having strong Product , Support and Service.)
OEM Eligibility Criteria for Racks Components
OEM Should be International certification for the ISO 45001 Health and Safety Management System, ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 14064-1 Greenhouse Gas Inventory Standards.
All Racks should be from Same OEM.

Approved

(Goraksha Gadilkar, I.A.S.)
Chief Executive Officer
Shri Saibaba Sansthan Trust, Shirdi

English Medium School	
5th	
4th	24 port
3rd	
2nd	24 port
1st	
Ground floor	24 port 24 port
Basement floor	8 port

1GB Up-Link

Auditorium	
2nd	
1st	
Ground floor	24 port 24 port
Basement floor	

1GB Up-Link

JR & SR Collage	
5th	
4th	24 port
3rd	
2nd	24 port
1st	
Ground floor	8 port
Server Room	24 port
Basement floor	8 port

Kanya Vidya Mandir	
5th	
4th	
3rd	24 port
2nd	
1st	24 port
Ground floor	24 port
Basement floor	8 port

Sports complex	
1st	
Ground floor	24 port

Swimming pool	
1st	
Ground floor	24 port

1GB Up-Link

(Note – All Fiber has 1GB Up-Link & All Switches are Manageable)