

**VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY,
ODISHA, BURLA – 768018**

Advt.No.VSSUT/CIF/00R/222

Date: 08.06.2015

QUOTATION CALL NOTICE

Sealed quotations are invited by the undersigned from intending reputed, registered and experienced firms for Supply, Installation, Commissioning, Testing, training and Maintenance of Digital Camera CCTV Surveillance System with Accessories in the University. The last date of submission of quotation is 06.07.2015 up to 04.00PM. The Technical bid shall be opened on 08.07.2015 at 04.00PM. For details visit University website www.vssut.ac.in.

Sd/-
Registrar

Memo No. VSSUT/CIF/00R/223(5)

Dated: 08.06.2015

Copy to :

1. M/s/ Display Lines, 219 Saheed Nagar, Bhubaneswar. The above advertisement may be published in Odisha edition of "The Samaj (Oriya Daily)" and all editions of "The Times of India (English Daily)" newspaper on 09.06.2015 or 10.06.2015 in I & PR approved rates in one issue using minimum space. The bill may be sent in triplicate alongwith a copy of the paper in which the publications is made.
2. University Notice Board
3. Dean (Faculty & Planning) with a request to display the advertisement on the University website.
4. The Comptroller of Finance, VSSUT, Burla for Information.
5. PA to Vice Chancellor for kind information of Hon'ble Vice-Chancellor.


REGISTRAR
REGISTRAR
V.S.S. University of Technology
Burla, Sambalpur, Orisha-768018

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA, BURLA
(Formerly University College of Engineering, Burla)

Po: Engineering College, Burla, Dist: Sambalpur, Odisha, India, PIN: 768018

Phone: 0663-2430211, FAX: 0663-2430204, Website: www.vssut.ac.in



Quotation Document for Supply, Installation, Training and Maintenance of Digital CCTV Surveillance System with necessary Accessories at VSSUT, Burla.

Quotation Call Notice No. VSSUT/CIF/

Date:

Submitted by

M/s _____

Last Date and Time of Submission of Quotations by Registered/Speed Post only : 06.07.2015 up to 4.00PM during Office Hours.

Cost of Quotation Documents : Rs 500/-(rupees Five Hundred Only)

Date & Time of Opening of Technical bid : 08.07.2015 at 4.00PM

Date & Time of Opening of Price bid : To be notified & intimated after evaluation of Technical bid

The Document is prepared by VSSUT, Burla. It should not be reused or copied or used either in partially or fully in any form. The information provided by the bidders in response to this quotation document will become the property of VSSUT, Burla and will not be returned.

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA, BURLA

Detail Quotation Call Notice

Quotation Call Notice No. VSSUT/CIF/

Date:

Sub: Inviting quotation for Supply, Installation, Training and Maintenance of Digital CCTV Surveillance System at VSSUT, Burla.

The Registrar, Veer Surendra Sai University of Technology, Burla” invites sealed quotation from intending reputed and experienced firms for Supply, Installation, Training and Maintenance of CCTV Surveillance system with necessary Accessories at VSSUT, Burla.

This quotation document contains the following.

- (i) General Guide Lines for submission of quotation
- (ii) Technical Specification
- (iii) Scope of work
- (iv) Terms & Conditions of Supply, Installation, Training & Maintenance services
- (v) Information sheet of the bidder
- (vi) Undertaking by the Bidder
- (vii) The price bid

Important Dates

Last Date and Time of Submission of Quotations by Registered/Speed Post only : 06.07.2015 up to 4.00PM during Office Hours.

Cost of Quotation Documents : Rs 500/-(rupees Five Hundred Only)

Date & Time of Opening of Technical bid : 08.07.2015 at 4.00PM

Date & Time of Opening of Price bid : To be notified & intimated after evaluation of Technical bid

Sd/-

Registrar

GENERAL GUIDE LINES FOR SUBMISSION OF QUOTATION

1. Eligibility: The bidder should verify its eligibility criteria as mentioned below before submitting the quotation and enclose the required documents in the sequence listed below, to avoid rejection or disqualification of your quotation. The bidder should meet the following criteria.
 - a. The Bidder should be OEM (Original Equipment Manufacturer) or Authorized Dealer/ Distributor of the OEM of offered product (Please submit manufacturer's authorization letter, in original, on the OEM's letter head duly signed by authorized signatory).
 - b. Original Equipment Manufacturer / authorized distributors of Video Surveillance System shall have base with technical support function and service support in Odisha state.
 - c. Must be a Reputed system integrator having an agreement / certificate of technical collaboration with any reputed IP Camera manufacturer and Video Management & Analytics software .
 - d. The bidder must have wide experience in the field of providing solutions for applications relating to CCTV surveillance system in Govt. organization / public sector / Educational organization. The documentary evidence shall be provided by the firm in support of their experience.
 - e. The bidder should have large support network, with presence across India.
 - f. The bidder should be a registered company making profit for the last three years, having good business track record.
 - g. The bidder should be a registered firm in India, having C.S.T /VAT/PAN/TIN/Service Tax etc.
2. The intending firms may visit the University, at their own expense on all working days during office hours before quoting, to acquaint themselves with the (i) scope and extent of work, (ii) extent of the university campus and (iii) environment in which their work is required to be carried out. A pre-bid presentation is to be given by the vendors with prior appointment with the Prof.-in-Charge; Central Internet Facility of the University. Vendors quoted without understanding the requirement may be rejected.
3. The Bidder shall have the single point responsibility for the complete Turnkey solution including supply, installation, testing & commissioning and maintenance.

4. **Cost of quotation documents:** The cost of quotation documents is Rs.500/- (Rupees Five Hundred Only) (Non-refundable). The quotation documents can be downloaded from the University website www.vssut.ac.in and have to deposit a DD equal to the cost of quotation documents drawn in favor of “The Comptroller of Finance, Veer Surendra Sai University of Technology, Burla” payable at SBI, Burla along with quotation.
5. The quotation must be submitted in two parts :(i) **Technical bid** & (ii) **Price bid**.
The two bids must be submitted in two separate sealed envelopes clearly marking the bid’s name and must be put in the single outer cover subscribing as “**Quotation for CCTV Surveillance System**” and also the quotation call notice number.
6. EMD for the amount of **Rs.25,000.00** (Rupees Twenty Five Thousands Only) in the shape of Bank draft drawn in favor of “The Comptroller of Finance, Veer Surendra Sai University of Technology, Burla” payable at SBI, Burla. The EMD will not carry any interest. The EMD of unsuccessful bidder shall be returned within fifteen days of finalization of the work order. It shall be returned by speed post to the address of the bidder mentioned in Table-1. The University shall not be responsible for any non-receipt of the EMD by post.
7. This quotation documents must reach to “The Registrar, Veer Surendra sai University of Technology, Burla, Sambalpur-768018 (Odisha) by the last date of submission under a sealed cover by registered/ speed post only. The quotations received after the due date & time is liable to be rejected. Quotation by FAX/ e-mail will not be entertained.
8. This quotation documents must be filled in completely and signed by the authorized signatory of the bidder on all the pages as acceptance of all the guidelines, terms and conditions laid in this quotation document. (This document should be printed on both side of the A4 size paper sheet).
9. The quotations shall be opened in the presence of all bidder or their authorized representatives on due date and time. The bidder's representatives shall carry the letter of authorization and are required to sign an attendance sheet. Only one representative for any bidder shall be permitted to attend the quotation opening.
10. If the date of opening of quotation happens to be a holiday, a revised schedule will be notified. However, in absence of such notification, the quotation will be opened on the next working day. The time and venue remains unaltered.
11. Any additional information bidders wish to provide may be attached separately.

12. The quotation should contain the following documents.

a. **Technical bid containing,**

- i. This quotation document signed on each page by the authorized signatory of the bidder.
- ii. Self-attested copy of PAN, VAT registration, VAT clearance and service tax and incorporation etc., issued by appropriate government authority for the required services with seal of the quotation.
- iii. Bank draft (Non-refundable) towards the cost of quotation documents in favor of the Comptroller of Finance, Veer Surendra Sai University of Technology, Burla payable at SBI, Burla.
- iv. Bank draft for EMD in favor of the Comptroller of Finance, Veer Surendra Sai University of Technology, Burla payable at SBI, Burla.
- v. List of user Clients and documents related to experience of the bidder along with address and contact no..
- vi. Detailed specification of product along with the service support.
- vii. A technical capability document describing the relevant facilities and services available with them.
- viii. Detailed literature along with make, model, data sheets, pamphlets and performance curves as applicable shall be attached with the technical offer.
- ix. Any other documents in support of the eligibility of the bidder.

b. **Price bid:** The price bid shall specify the following,

- i. Cost for supply and installation of Digital CCTV Surveillance System as per technical specification and scope of work including training etc separately in the table-2(A).
- ii. Charges for Comprehensive Annual Maintenance of Digital CCTV Surveillance System in the table-2(B).

13. The quotation is liable to be cancelled, and the EMD shall be forfeited to the **COF, VSSUT, Burla**, in the event of any failure to comply with any of the clauses of the terms and conditions of this quotation call document or in the event of bidder withdrawing his offer before/ after finalization of this selection process. Bid without the required EMD amount will be summarily rejected.

14. Bid shall remain valid for 90 days after the date of bid opening. The bid valid for a shorter period shall be rejected by the University as non-responsive. In exceptional circumstances, the University may request for the consent of the bidder for an extension to the period of bid validity.
15. To assist evaluation and comparison of the bids, the University at its discretion may ask the bidder for clarification of the bid. The clarification and response from bidder shall be in writing.
16. The University reserves the right at the time of award of the order to increase or decrease the quantity of the goods and services specified in the schedule of requirements without any change in unit price of the ordered quantity.
17. The University reserves the right to reject any or all the quotations without assigning any reason and the decision of the university shall be final & binding.
18. The University reserves the right to call the bidders and to conduct negotiations, if necessary and has the right to select more than one bidder for one or more items at its discretion.
19. The element of applicable taxes is required to be shown separately and distinctly.
20. The University is not responsible for delay, loss or non-receipt of quotation documents sent by post.
21. Any deviation in terms and conditions shall not be entertained. If it is necessary to change any of the terms and conditions of the contract/ order during the contract execution process, it should be agreed upon by both the parties.
22. The University reserves the right to order all or part or none of the items and/or services given in this schedule. The University also reserves the right to order additional services based on the rates finalized as a result of this quotation.
23. Any dispute arising out of the deal shall be subjected to the jurisdiction of the court at Sambalpur within the State of Odisha.
24. The University reserves the right to add/delete/change any of the terms and conditions stipulated in this quotation call document.
25. The University may reject the bid even if it is accepted but the successful bidder fails to execute any of the terms and conditions mentioned herein.

26. A) Delivery Address: The Registrar,
Veer Surendra Sai University of Technology, Odisha
BURLA-768018
Dist. Sambalpur (Odisha)

B) Billing Address: The Registrar,
Veer Surendra Sai University of Technology, Odisha
BURLA-768018
Dist. Sambalpur (Odisha)

Technical Specification

The CCTV Surveillance system should be an IP based CCTV surveillance system with the following descriptions of items. Technical specification mentioned below is the minimum; any better specification will also be accepted. A list of some known/ approved makes for CCTV System as given below is indicative.

1. Cameras & NVR : Sony / Hikvision / Honeywell / Panasonic or equivalent make of repute.
2. UPS : APC / Numeric/Emerson or equivalent make of repute.
3. Cables : Finolex / Polycab / Tyco / Molex or equivalent make of repute.
4. 24-P Switch: Cisco/Juniper/HP or equivalent make of repute.

Please note that camera & NVR should be of same make. Vendors should mention the make, model and technical specification of each item to be supplied in the technical bid. Vendors quoted for substandard products will not be considered and the offered quotations are liable for rejection.

A. SPECIFICATION FOR CAMERAS & NVR

1. Megapixel IP dome Camera

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Image sensor	1/3" progressive scan CMOS	
2	Min. illumination	0.028lux@F2.0, AGC on 0 Lux with IR	
3	Image Resolution	1.3 megapixel (1280 x 960) HD resolution	
4	Lens	2.8 ~ 12 mm @F1.4, angle of view: 80° ~ 28.7°	
5	Day & night	IR 30M	
6	Digital noise reduction	3D DNR	
7	Wide dynamic range	YES	
8	Backlight compensation	YES	
9	Video compression	H.264 / MJPEG	
10	Dual stream	YES	
11	Frame rate	60Hz: 30fps (1280 x 960), 30fps (1280 x 720)	
12	Image settings	Saturation, brightness, contrast adjustable through client software	
13	Alarm trigger	Motion detection, tampering alarm	
14	Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1X, Qos	
15	System compatibility	ONVIF, PSIA, CGI	
16	General functionalities	User authentication, watermark	
17	IP66, weatherproof	yes	
18	POE	YES	
19	Onboard storage	Built-in Micro SD / SDHC / SDXC card slot, up to 64 GB	
20	Vandal proof	Yes	
21	Power supply	12 VDC ± 10%, PoE (802.3af)	

2. Megapixel IP bullet Camera

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Image sensor	1/3" progressive scan CMOS	
2	Min. illumination	0.028lux@F2.0, AGC on 0 Lux with IR	
3	Image Resolution	1.3 megapixel (1280 x 960) HD resolution	
4	Lens	4mm, Angle of view: 75.8	
5	Day & night	IR 50M	
6	Digital noise reduction	3D DNR	
7	Wide dynamic range	YES	
8	Backlight compensation	YES	
9	Video compression	H.264 / MJPEG	
10	Dual stream	YES	
11	Frame rate	60Hz: 30fps (1280 x 960), 30fps (1280 x 720)	
12	Image settings	Saturation, brightness, contrast adjustable through client software	
13	Alarm trigger	Motion detection, tampering alarm	
14	Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1X, Qos	
15	System compatibility	ONVIF, PSIA, CGI	
16	General functionalities	User authentication, watermark	
17	IP66, weatherproof	yes	
18	POE	YES	
19	Power supply	12 VDC \pm 10%, PoE (802.3af)	

3. Outdoor High Speed Dome (PTZ) Camera Technical Specification (For 24-hour Surveillance of low light Area):

Sr. No.	Parameter	Specification	Complied (Y/N)
1	Image sensor	1.3" Progressive Scan CMOS, IP 66	
2	Min. Illumination	Color: 0.05Lux@(F1.4, AGC ON); B/W: 0.01Lux@(F1.4, AGC ON); 0 Lux with IR	
3	White balance	Auto / Manual /ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp	
4	Digital noise reduction	3D DNR	
5	Backlight compensation	BLC	
6	Wide dynamic range	128X Digital WDR	
7	Day & Night	IR Cut Filter	
8	optical zoom	20X	
9	digital zoom	16X	
10	Smart tracking	SUPPORT	

11	Pan / Tilt range	Pan: 360° endless; Tilt: - 15° ~ 90° (Auto Flip)	
12	3D intelligent positioning	SUPPORT	
13	Proportional zoom	Rotation speed can be adjusted automatically according to zoom multiples	
14	DEFOG	SUPPORT	
15	SD memory card	Micro SD Slot, up to 32GB	
16	Streams	Dual Streams	
17	Protocols	IPv4/IPv6, HTTP,HTTPS,802.1x,Qos, FTP,SMTP,UPnP,SNMP,DNS, DDNS, NTP,RTSP,RTP,TCP, UDP, IGMP,ICMP,DHCP, PPPoE	
18	Simultaneous live view	Up to 6	
19	Application programming	Open-ended API, support Onvif, PSIA and CGI	
20	Web browser	IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+, support multi-language	
21	Alarm trigger	Motion detection, Audio Exception Detection, Dynamic analysis, Tampering alarm, Network disconnect, IP address conflict, Storage exception	
22	Audio input	Optional audio input (LINE input), 2 ~ 2.4V[p-p]; output impedance: 1KΩ, ±10%	
23	Audio output	Line level, impedance: 600Ω	
24	ROI encoding	SUPPORT	
25	Max. image resolution	1280×960	
26	Frame rate	60Hz:30fps(1280×960), 30fps (1280×720)	
27	3D intelligent positioning	SUPPORT	
28	RS-485 protocols	HIKVISION, Pelco-P, Pelco-D, self-adaptive	
29	Power	-A: 24VAC, max. 50W	
30	Working temperature	-A: -30°C ~ 65°C(-22°F ~ 149°F)	
31	PoE	SUPPORT	
32	SVC	Support	
33	Power-off memory	SUPPORT	

4. Network Video Recorder

Sl. No.	Parameter	Specification	Complied (Y/N)
1	IP video input	128-ch	
2	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1k Ω)	
3	Incoming bandwidth	400Mbps	
4	Outgoing bandwidth	400Mbps	
5	Third-party network cameras supported	YES	
6	Recording resolution	8MP/5MP/3MP/1080p/UXGA/720p/VGA/4CIF/D CIF/2CIF/CIF/QCIF	
7	Megapixel supported	Up to 8 Megapixels resolution	
8	HDMI output	2-ch (/H models supports the HDMI outputs to be expanded to 6 channels), resolution: 1920 x 1080P /60Hz, 1920x1080P /50Hz, 1600 x 1200/60Hz, 1280 x 1024 /60Hz, 1280 x 720 /60Hz, 1024 x 768 /60Hz	
9	VGA output	1-ch, resolution: 1920 x 1080P /60Hz, 1600 x 1200 /60Hz, 1280 x 1024 /60Hz, 1280 x 720 /60Hz, 1024 x 768 /60Hz	
10	Audio output	1-ch, RCA (2.0Vp-p, 1K Ω)	
11	Live view / Playback resolution	8MP/5MP/3MP/1080p/UXGA/720p/VGA/4CIF/D CIF/2CIF/CIF/QCIF	
12	SATA	16 SATA interfaces for 16 HDDs	
13	eSATA	1 eSATA interface	
14	miniSAS (Optional)	1 miniSAS interface	
15	HDD Capacity	Up to 4TB capacity for each HDD	
16	Array type	RAID0, RAID1, RAID5, RAID10	
17	Serial interface	RS-232; RS-485 (reserved); Keyboard;	
18	4 Fiber Optic Interfaces	YES	
19	4 LAN Network Interfaces	YES	
20	Alarm in/out	16/8	
21	Power supply Consumption (without hard disk)	\leq 300 W	

B. General Eligibility Criteria for Passive OEM

Sl. No.	Eligibility Criteria	Compliance with Document
1	OEM should have direct presence in India more than at-least 15 years	
2	OEM should have members participating in Telecommunications Industry Association committee with presence in all of the Telecommunication subcommittees of the following: <ul style="list-style-type: none"> • TIA TR-42.1 Subcommittee on Commercial Building Telecommunications Cabling • TIA TR-42.7 Telecommunication Copper Cabling Systems • TIA TR-42.12 Subcommittee on Optical Fibers and Cables 	
3	Passive OEM should be among the top 3 players in terms of Market share in India with steady business growth to ensure continued and proactive	

	logistics support.	
4	OEM should be a member of Telecommunications Industry Association (TIA) Information and Communications Technology (ICT) Companies ICT Green Initiative to support energy efficient environment.	
5	OEM should have technology development program partnership with any one of the top 3 Active networking (Switches and Routers) OEM's globally.	
6	OEM should have atleast One RCDD certified person sitting in India	
7	Factory test reports from OEM to be supplied along with Copper and Fiber cables.	
8	Unshielded twisted pair cabling system, Certificate by Intertek (ETL) for the 4-Connectors channel testing to the Cat 6 Cabling system as per the ANSI/TIA 568 C.2 & as well as the ISO 11801 standards up to 600 MHz. Document to be submitted.	
9	OEM shall provide min 25 years of warranty on component as well as performance for all the offered products	

1. 6 Core Fiber outdoor armored SM cable, OS2

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Cable Type	6 fiber Single Mode, Armoured, unitube, Gel filled cable complying to ISO/IEC 11801, EN50173, ANSI/TIA 568-C.3, Telcordia GR-409; suitable for use in indoor / outdoor ducts, direct burial and backbone cabling	
2	Fiber Type	Single Mode, 9/125 micron primary coated buffers, OS2 (IEC 60793-2-50, B1.3 and ITU T G652.d). Shall be manufactured using Vapour Axial Deposition technology.	
3	Armour	Corrugated Steel Tape (CST) Armour of min. 0.15 mm thickness	
4	Attenuation	@ 1310nm <=0.34 db/Km MAX	
		@1550nm <=0.22 db/Km MAX	
		@ 1380-1386nm <= 0.31db/Km	
5	Cut Off Wave length (nm)	<1260	
6	Point Discontinuity (db)	<= 0.1	
7	Chromatic Dispersion @	<=3.5	

	1310nm (ps/nm x Km)		
8	Chromatic Dispersion @ 1550nm (ps/nm x Km)	<=18	
9	Core/Mode-Field (um)	9	
10	Clad Diameter (um)	125	
11	Coat Diameter	250	
12	Loose tube material	PBTP Loose tubes filled with water blocking Thixotropic gel.	
13	Loose tube diameter (Nominal)	3 mm	
14	Jacket material	HDPE outer jacket	
15	Jacket thickness	2 mm Min.	
16	Strength members	Water blocking Glass yarn strength members	
18	Tensile Strength	1250 N	
19	Crush Resistance	3000 N	
20	Min Proff Strength (Kpsi)	100	
21	Cable Diameter	10 + - 0.5 mm	
22	Min Bend Radius – Installation (mm)	200	
23	Min Bend Radius – Service (mm)	160	
24	Cable weight Kg/Km	<= 100	
25	Operating Temperature	-40 Degree C to +70 Degree C	

2. CAT6 UTP CABLE

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Type	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801	
2	Conductors	23 AWG solid bare copper	
3	Insulation	Polyethylene	
4	Jacket	PVC Jacketing	
	Pair Separator	Cross-member (+) fluted Spline.	
5	Approvals	(a) UL Listed / UL Verified	
		(b) ETL verified to TIA / EIA Cat 6	
6	Operating temperature	-20 Deg. C to +60 Deg. C	
7	Frequency tested up to	Minimum 600 MHz; ETL report for 4 connector channel performance upto 600 MHz to be provided.	
8	Delay Skew	45ns MAX.	
9	Bend Radius	4 * Cable Diameter	
10	Impedance	100 Ohms + / - 15 ohms, 1 to 600 MHz.	
11	UL/NEC Ratings	Must be CMR Rated	
12	Mutual Capacitance	5.6 NF MAX /100 Mtr.	
13	Conductor Resistance	66.58 Ohms Max / KM	
14	Propagation Delay	536 ns/100 Mtrs. MAX @ 250 Mhz	
15	Performance characteristics @ 250 MHz	Attenuation: 32.8dB/100m NEXT : 44dB PS NEXT : 41dB ELFEXT : 23dB PSELFEXT : 19dB Return Loss: 25.3dB ACR : 11.3dB	
16	ROHS Compliant	ROHS/ELV Compliant	

3. CAT6 UTP JACK PANELS 24 PORT

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Type	24-port, Modular, 1U, PCB based, Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 and ISO/IEC 11801	
2	Port arrangement	Configured as 6 Port Module with individually replaceable CAT-6 Jacks	
3	Circuit Identification	Front of each module shall be capable of accepting 9 mm to 12 mm labels	
4	Port Identification	9mm or 12mm Labels on each of 24-ports (to be included in supply)	
5	Modular Jack	750 mating cycles	
6	Wire terminal	200 termination cycles	
7	Accessories	Integrated bend-limiting strain-relief unit for cable entry	
8	Materials		
	Housing	Polyphenylene oxide, 94V-0 rated	
	Wiring blocks	Polycarbonate, 94V-0 rated	
	Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate	
	Panel	Black, powder coated steel	
9	Approvals	UL listed / ETL Verified	
10	Termination Pattern	TIA / EIA 568 A and B;	
11	ROHS Compliant	ROHS/ELV Compliant	

4. CAT6 UTP PATCH CORDS 2 Mtr

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Type	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801	
2	Conductor	24 AWG 7 / 32, stranded copper conductors 100 Ohm	
3	Length	2 Mtr	
4	Plug Protection	Transparent Slim boot	
5	Nominal Outer Diameter	5.3 mm	
6	Jacket	Lead free PVC	
7	Flammability	UL 94V-0	
8	Operating Temperature Range:	-40° to 70° C (-40° to 158° F)	
9	Warranty	25-year component	

5. 6 Core Fiber LIU Rack-mountable, 1U fully loaded, SM

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Fiber Management shelf	The fiber management shelf shall have compact design and be ideal for high density front patching applications.	
		Should be fully loaded and factory fitted assembly with no assembling required during installation at site	
		• High Density: 1U: 6/24 Fiber terminations	
		• Should be supplied loaded with LC adapters, splice trays, LC SM OS2 Pigtails and fiber management rings	
		Compatible with all connector types	
		• Mounting brackets can be placed in different positions	

2	Drawer style shelf	o Easy access to splicing tray	
		o Easy access to back side of connector	
3	Accessories	Fiber management guides, radius controls & secure tie downs provided	
		Pre loaded with labeling strips	
		Sealed cable inlets for dust and rodent protection	
4	Material	Min 16 gauge steel	
5	Compact size (mm)	44 x 450 x 320 (HxWxD)	
6	Pigtails loaded in Shelf:		
i	Type	LC Type, SM 1.5 Mtr.	
ii	Attenuation	<=0.3 dB, at 1310 nm	
iii	Return Loss	>= 20 dB	
iv	Cable Info	9/125 um	
v	Outer Dia	0.9 mm	
vi	Jacket material	LSZH	
vii	Buffer Color	Gold Metallic	
viii	Buffer Material	UV Cured Acrylate	
7	Warranty	25 year warranty	
8	Compliance	ROHS / ELV Compliant	

6. SC LC Fiber Patch Cables, SM

Sl. No.	Parameter	Specification	Complied (Y/N)
1	Make and Type	SC to LC Duplex tuned Fiber Optic Patch Cord, 9/125 Micron	
2	Cable Sheath	LSZH	
3	Cable Diameter	1.8 x 3.6 mm	
4	Ferrule	Ceramic	

5	Buffer	Tight buffered	
6	Insertion Loss	MAX .3 db	
7	Return Loss	> 45 db	
8	Length	3 Mtrs, 5 Mtrs	
9	Temperature Range	-10 Degree C to +60 Degree C	
10	ROHS	ROHS/ELV Compliant	

C. TECHNICAL SPECIFICATION FOR LAYER-2 MANAGED SWITCH

Sl. No.	Description	Complied (Y/N)
A	Architecture	
1	Shall have 24 autosensing 10/100/1000Base-T ports with additional 4 Gigabit SFP ports	
2	Shall support both IPv4 and IPv6 from day1 with full wire speed IPv6 operation	
3	Shall support redundant flash images	
4	Shall have minimum switching capacity of 56Gbps and minimum forwarding capacity of 41Mpps	
5	Shall support a minimum of 16000 MAC address entries	
6	Shall be rack mountable with required accessories and shall have a suitable console port	
7	Shall be a full-featured manageable Layer-2 switch (switches with limited CLI or smart managed type will not be acceptable)	
B	Layer-2 Features	
1	Shall support IEEE 802.1Q, IEEE 802.3ad LACP	
2	Shall support IEEE 802.1s Multiple Spanning Tree Protocol	
3	Shall support a minimum of 512 active VLANs	
4	Shall support dynamic assignment of VLANs	
5	Shall support IPv6 based ACL and QoS	
C	Quality of Service & Convergence	
1	Shall support QoS features based on Layer-4 information	
2	Shall support port mirroring	
3	Shall support RMON	
4	Shall support minimum 4 queues	

5	Shall support LLDP, LLDP-MED, & Voice VLAN	
6	Shall support IGMP snooping, & MLD snooping	
D	Security	
1	Shall support port security methods like 802.1x & RADIUS	
2	Shall support SSL	
3	Shall have built-in protection features such as:	
	a) Protection from DoS attacks or equivalent	
	b) STP Root guard & STP BPDU guard	
	c) ACL (Based on IPv4, IPv6 and VLAN)	
E	Management	
1	Shall support IEEE 802.3AB LLDP	
2	Shall support secure management access methods (CLI, GUI or MIB) through SSH, SSL, and/or SNMP	
F	Warranty & Support	
1	Shall have manufacturer's direct warranty support with next-business-day hardware replacement (inclusive of power supply and fans) including 24x7 software updates and upgrades during the warranty/contract period.	

D. SPECIFICATION FOR 1G SFP LX TRANSCEIVER (SMF)

Sl. No.	Description	Complied (Y/N)
1	Shall be of the same make as that of the switch	
2	Shall have 1 x 1000Base-LX LC type port	
3	Shall be of SFP configuration with operating temperature support up to 70°C.	
4	Shall have manufacturer's direct warranty support with next-business-day hardware replacement during the warranty/contract period.	

SCOPE OF WORK

The scope includes Design, supply, installation, testing, commissioning, Training & handing over, ONE year warranty and TWO years Comprehensive Annual Maintenance Contract after expiry of warranty period. Tenderers are advised to quote for total bill of materials considering this as a turnkey project for providing Digital CCTV Surveillance solution in the University premises. Please note that any addition to bill of materials will have to be mentioned in the bidder's commercial offer itself.

1. Laying, terminating & connecting Single mode 6-core Optical Fiber Cable (OFC) in ring topology with redundancy between cameras & control room by using necessary accessories like LIU, pigtail, fiber patch cords etc. The proposed Solution should allow University officials to locally and centrally monitor its facilities from a remote location on a Portable/Fixed personal computer monitor.
2. Wall mounting of Racks with 24-p patch panel & 24-p PoE switches in different locations with power supply provision.
3. Installation of 64nos. (02nos. PTZ and 62 nos. Fixed) cameras including poles as required & with suitable mounting arrangement in a Vandal Proof Housing. The requirement of number of cameras may increase at the time of placing order or thereafter in future.
4. Establishing control rooms for configuration, operation, monitoring & maintenance with supply of one high resolution 42" LED Display for monitoring purpose has to be setup. Alternate monitoring at other Locations with desktop PC for individual camera.
5. Installation, configuration & customization of video software from the Main Control Room.
6. Installation of I/O ports in position equals to number of cameras.
7. Supply & Laying of Cat-6 UTP from switch to I/O port with casing & capping.
8. Supply & installation of weather proof enclosure and Surge & lightening protection for PTZ camera.
9. Wherever required, local power supply to the cameras is to be provided with necessary arrangement.
10. PTZ Camera Pole : Pole should be fabricated from MS, weatherproof & powder coated, painted, up to 6-meter high from ground level with RCC foundation, box mounted up to 1.25 meter from ground level for switch with lock & various cable arrangements for camera & network equipment. Vendor should supply and install all the mounting accessories.

11. Successful Bidder after placement of order shall be fully responsible to get all drawings approved from University before execution.
12. Training: - Vendor shall provide Minimum 1 Month's training to a team of assigned staffs of the University for Surveillance Monitoring and maintenance.
13. The entire system shall be as per BOQ, drawings and technical specifications enclosed with tender documents. The price quoted by the vendor should include all the expenses to be incurred in commissioning of all cameras with power supply, accessories and other devices complete with software.
14. Provide supervisory specialists and technicians at the job to assist in all phases of system installation, start up and commissioning.
15. No extra cost shall be paid for miscellaneous items if required to complete the work as per the design concept.
16. Under CAMC, the firm has to make quarterly visit besides breakdown call booking and service report for each quarter is to be submitted. Breakdown complaint shall be attended and rectified within 24 hours.

TERMS AND CONDITIONS OF SUPPLY, INSTALLATION, TRAINING & MAINTENANCE

1. All the terms and conditions enumerated in the quotation document shall remain enforced and shall form part of the contract.
2. Acceptance Certificate: The firm must submit a certificate for the acceptance of the work order within seven days of the issue of the work order.
3. The firm may be required to install and run the system within a fortnight from the date of issue of the work order. Rate offered in the quotation shall not be enhanced under any circumstance.
4. The price coated by the vendor should include all the expenses incurred in commissioning of all cameras with power supply, accessories and other devices complete with software.
5. The CCTV surveillance system should consist of IP Fixed dome cameras (indoor type), PTZ & fixed bullet cameras, software, NVR/server, power supply, cables etc.
6. Bidders shall provide details on the following: (a.) Security features incorporated within the software. (b). Ability to develop, test & set-up. (c) Scalability of the system (d) The level of support of the bidder and their partners or agents during and after the implementation.(e)Training & Implementation (f) Video clips of various cameras installed and commissioned by the vendor may be attached
7. Termination of contract: The University, may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Supplier, terminate this contract in whole or in part.
 - a. If the supplier fails to deliver any or all the goods within the time period (s) Specified in the contract, or any extension thereof granted by the University
 - b. If the Supplier fails to perform any other obligation(s) under the contract;
 - c. If the Supplier, in either of the above circumstances, does not remedy his failure within a period of 15 days (or such longer period as the University may authorize in writing) after receipt of the default notice from the University.
 - d. On a notice period of 30 days.
8. The University may at any time terminate the Contract by giving written notice to the Supplier, without compensation to the supplier if the supplier becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or effect any right of action or remedy which has accrued or will accrue thereafter to the University.

9. **Payment: Payment of supply and installation Part:** 90% Payment will be made after 15 days of successful supply, installation, and testing the functioning of the system and also imparting training. Balance 10% shall be paid after 30 days of successful functioning of the system. **Payment of maintenance part:** Payment shall be made on quarterly basis after satisfactory completion of each quarter. No advance payment for maintenance is permissible.
10. The supplier shall submit all bills in triplicate on printed forms to the University. The billing must be done with Odisha State VAT billing.
11. The firm must submit valid and up-to-date VATCC, service tax certificate and PAN along with the bill before release of payment.
12. The University will make payments through account payee cheque drawn on SBI Burla, in Indian Rupees. No interest on any deferred claim arising out of this contract shall be payable in any case what so ever.
13. The prices charged by the firm for maintenance services performed under the contract shall not be higher from the prices quoted by the firm in this quotation.
14. The firm shall submit a **performance security for 10%** (Ten percent) of the average annual value of the maintenance part in the form of bank guarantee to cover the entire period of contract. Performance security will be released only after successful completion of the period of the contract i.e. three years. The performance Security will not bear any interest.
15. The assets and articles once purchased and installed by the University shall be property of the University.
16. New or changed software / hardware requirements, particles and policies that effect University should be intimated and implemented by the firm if required so.
17. The tracking of changes done to the systems and network infrastructure is a part of this contract. This should be documented to the University.
18. The University may conduct periodic review of the performance with the firm support head.

19. Warranty & Annual Maintenance:

- a. All equipment, software and hardware shall be covered by at least **one year on-site warranty** from the date of commissioning of the project. However, if any individual component has warranty of more than one year offered by manufacturers, the same will prevail. Further, they have to provide TWO years Comprehensive Annual Maintenance Contract after expiry of warranty period.
 - b. In case, any of the equipment is to be taken out for repairs to firm's workshop, a standby equipment of same/higher configuration shall be provided by the firm.
 - c. The firm shall have to depute well qualified engineers for a period of one month after successful installation of the equipment/accessories for commissioning of the project and to train the University staff for operating such system. The engineers deputed should be well versed with the equipment installed by the firm and equipped with all essential spare parts and tool kits.
 - d. The services of the vendor may be required on non-working days or beyond office hours on working days on some occasions to meet emergency situation. The vendor shall ensure that on such occasions also the personnel are deputed.
 - e. Any problem reported by the University will be notified to the service engineers and will be attended by them based on the priority indicated by the University.
 - f. The vendor will have to follow all the security instructions applicable from time to time. If the engineers deputed by the firms are found guilty of any violation of security norms, they will be liable to be prosecuted under the law.
 - g. The comprehensive maintenance should include corrective maintenance i.e. repair/replacement of spares etc. It can be extended depending on performance satisfaction.
 - h. During CAMC, four quarterly visits are to be made besides breakdown calls /fault booking. Contact address with mobile no./phone no./Fax/e-mail address are to be provided for fault booking. For service support, the escalation matrix is to be provided along with technical bid.
20. Penalty: If the firm fails to provide the maintenance services for more than 48 hours, penalty equal to charges for the period (this period excludes the time span due to force majeure such as earth quake, fire etc., or any such event, which are beyond the act of human) for which services has not been provided, may be imposed and deducted from the next bill.

21. Jurisdiction and Right to Amend Rules: The University reserves the right to amend the rules of operation whenever and wherever considered necessary and appropriate. The same shall be intimated to the firm in due course. The University rules shall be binding for execution of the contract. Further, in case of any dispute arising out of or in connection with the aforesaid contract either during subsistence of the contract or thereafter, the Vice-Chancellor of the University is the sole arbitrator to decide the same and his decision is final and binding on both the parties. If differences persist even after attribution and there are compelling reasons to go the court, it will be decided in the court of Sambalpur only.

Table-1 INFORMATION SHEET OF BIDDER

S/L	Description	To be filled in by the supplier
1	Name of the Vendor	
2	Address with phone No./FAX/ e-Mail	
3	Contact Person(s) Phone No. /Mobile No.	
4	Contact Escalation Matrix (Separate sheet may be attached)	
5	Details of Bank Draft towards the cost of quotation documents	
6	Details of EMD	
7	VAT /Service Tax registration details	
8	Experience Details (Separate sheet may be attached)	
9	Financial Turn Over (Annual) for last three years	

DECLARARION: I/We hereby certify that the information furnished above is full and correct to the best of my/our knowledge. I/We understand that in case any deviation is found in the above statement at any stage, the quotation is liable to be rejected.

UNDERTAKING BY THE BIDDER

To

The Registrar,

Veer Surendra Sai University of Technology,

Burla, 768-018.

Subject: Quotation for Supply, Installation and Maintenance of Digital CCTV Surveillance System with necessary Accessories at VSSUT, Burla.

Dear Sir,

Having examined the conditions of this quotation call document I/we, undersigned, offer for Supply, Installation and Maintenance of Digital CCTV Surveillance System with necessary Accessories & imparting training at VSSUT, Burla.

I/We undertake to take up the work order within 45 days' time, calculated from the date of issue of your work order.

1. I/We understand that you are not bound to accept the lowest or any quotation, you may receive.
2. I/We enclose all the sheets of this quotation call document duly signed by me/us on every page, as a token of having studied the specifications pertaining to this site and having accepted the same.
3. Certified that I/We have studied the full contents of the quotation call document and enclosures and agree to quote by the terms and conditions herein. In case of non-observance of any of the conditions mentioned in the quotation form, my/our quotation may be cancelled.

Dated:

Signature of

In capacity of

Duly authorized to sign the quotation for and on behalf of

Name and Address of the authorized Signatory

Signature

Date:

Financial Bid

The Financial Bid may be submitted as per the technical bids covering all possible equipment/materials required for the installation of the system. (Cost for each item may be mentioned separately).

Table-2(A): Digital CCTV surveillance system: All the items mentioned below are for Supply, installation & Commissioning and Training.

SL NO	ITEM	QUANTITY	UNIT	Rate	Amount	Amount including Tax
1	Fixed IP Dome camera	22	Nos.			
2	IP Bullet camera	40	Nos.			
3	IP PTZ camera with weather proof enclosure & surge protection.	2	Nos.			
4	24-port PoE Switch With 2-fiber module	08	Nos.			
5	24-port PoE Switch With 4-fiber module	01	No.			
6	24-port PoE Switch	02	Nos.			
5	128 Channel Network Video Recorder(NVR)	01	No.			
6	42" LED Monitor	01	No.			
7	1KVA Offline UPS with 1Hour Backup	11	Nos.			
8	2KVA UPS offline with 1hour backup &complete with battery & Rack	01	No.			
9	6U wall mount Rack	10	Nos.			
10	12U Wall mount Rack	01	Nos.			
11	I/O Box	62	Nos.			
12	Patch Panel	12	Nos.			
13	LIU	11	Nos.			
14	6 core OFC	1500	mtr			
15	UTP cat-6 cable	1000	mtr			

16	6Mtr Pole for PTZ camera	02	Nos.			
17	Casing & capping	1100	mtr			
18	Pigtail and LC-LC Connector	20	nos			
19	Electric board with plug and switch	11	nos			
20	Power supply for camera	As required	LS			
21	Electrical cable	As required	LS			
22	Media Converter	02	Nos.			
23	Training & one month's handling	LS	LS			
Total						

N.B.:-

- i. The quantity mentioned above is subject to change; however for finding out the lowest Bidder the above mentioned quantities will be used the bidder must submit the sheets mentioning the designation wise breakup for the total cost. No correction on this sheet shall be entertained.
- ii. Price quoted should be only in INR (Indian Rupee).
- iii. Prices shall be quoted inclusive of all taxes, duties, freight and forwarding and cost of labor for installation.
- iv. In case of any discrepancy between Unit Price & Total Price, the Unit Price will prevail.

Table-2(B): Comprehensive Annual Maintenance Contract

SL NO	ITEM	QUANTITY	UNIT	Rate	Amount	Amount including Tax
1	CAMC for three years from the date of satisfactory installation & commissioning of the system including One year Warranty & Two years after completion of warranty period.	01	No.			
2	2 nd year CAMC					
3	3 rd year CAMC					
4	Service Tax					
Total:						
(Rupees						

- i. Price quoted should be only in INR (Indian Rupee).
- ii. Prices shall be quoted inclusive of all taxes, duties, freight and forwarding and cost of labour for installation.
- iii. In case of any discrepancy between Unit Price & Total Price, the Unit Price will Prevail.

