

1	VIDEO CONFERENCING SYSTEM as per technical specifications	1
2	Optional - Full HD 46 inches Professional Display Unit with built in speakers as per technical specifications.	1
3	Optional - Wall Mounting Bracket suitable for above display unit.	1

Conditions

1. Bidder must submit Technical Compliance Sheet comparing the Technical Specifications of the items quoted with that of the Tender Technical Specifications, pointing out the Deviations clearly in the Remarks column.
2. Offers which come closest to the Technical Specifications only shall be selected and considered for placement of the order.
3. Bidder shall be InfoComm, USA Certified Member. Copy of the Certification must be submitted with the tender.
4. Bidder shall have its office with its Service Centre within Gujarat and must submit proof of that along with the offer. List of Service Personnel with their Education and Experience, who are available in Gujarat all the time, with their Mobile Nos. must be submitted for ensuring quick service and support.
5. Bidder must have enough expertise in supply and installation and maintenance of video conferencing system and must have done a minimum of 25 Video Conferencing projects themselves in India and details of all such projects must be attached with the name of the client.

TECHNICAL SPECIFICATIONS FOR VIDEO CONFERENCING SYSTEM – QTY ONE NO.

ESSENTIAL FEATURES:

- Provides TV-like video quality and up to 720p (incoming)
- Codec and camera must be separate so that codec will go into cabinet and the camera can go below the Display Unit.
- H.264 video support up to 4Mbps and ISDN (optional) up to 512 Kbps (4xBRI)
- 6-site multiparty conferencing via embedded MCU
- Advanced data sharing capabilities
- Data Pod must be supplied with inputs for VGA, Audio and USB for making presentations.
- Live Recording of Video Conferencing Session in Point to Point, Multi Point or in Idle Mode and the recording must be within the codec itself without relying upon any external device. Minimum 60 hours of recording must be possible. After recording, it must be possible to retrieve the recording to computer system by connecting PC to the USB port of the codec.
- Native 16:9 wide screen display support
- CD-quality audio using 20 KHz ultra-wide band audio
- Web-based management for easier control and administration
- Telnet API for AMX/Crestron
- Supports encrypted conferences using the H.235 encryption standard.
- USB connectivity in system for direct playback of PPT, excel, files during the session.
- Live streaming of point to point or multipoint call or video on idle mode on Internet, which can be retrieved by anybody by just dialing the IP no. of the Video Conferencing System

Video Specifications:

Transmission Speed	H.323: 64 Kbps – 4Mbps ISDN 64 Kbps - 512 Kbps (4xBRI) - Optional
Video Standards	H.261, H.263, H.263+/++ H.264 – up to 2 Mbps outgoing
Live Video Resolution	QCIF (176 x 144 pixels) QVGA (320 x 240 pixels) CIF (352 x 288 pixels) SIF (352 x 240 pixels) VGA (640 x 480 pixels) 4CIF (704 x 576) 4SIF (704 x 480) 720p (1280 x 720 pixels) incoming only
Video Frame Rate	Up to 10 fps: 64 Kbps Up to 20 fps: 96 to 192 Kbps Up to 30 fps: 256 Kbps and higher
Video Inputs	1 Composite and S-Video
Video Outputs	1 each: S-video, Composite, Digital Video Interface (DVI), VGA
Video Features	Video device discovery Automatic NTSC/PAL detection support for any number of video devices
HD Simulcast	Chair or Participant in any Interactive Multicast session Integrated Broadcast Viewer Use bandwidth-efficient IP multicast

Audio Specifications

Audio Features

- Full duplex echo cancellation
- Automatic noise suppression (ANS)
- Automatic gain control (AGC)
- Audio device discovery
- Audio tuning wizard
- Support for unlimited number of audio devices
- Headset and speaker profiles
- Voice Activity Detection (VAD)

Audio Standards

- 20 KHz: AAC-LD
- 14Khz: G.722.1 Annex C
- 7 KHz: G.722, G.722.1
- 3.4 KHz: G.711, G.723.1, G.728, G. 729
- G.728, G.729
- AMR (3G)

Data Specifications

- Data Sharing Methods
 - Laptop plug in (via Tabletop Pod)
 - USB storage key
 - Documents: PPT, PPS
 - Video clips (AVI, MPEG, WMV, etc.)
 - Audio clips (WAV, MP3)
 - Graphic files (BMP, GIF, TIF, etc.)
- Dual Streaming Capability
- Sharing of file, or the VGA input
- H.239 support

- Sending and receiving capability
- 1 live video source + 1 data source
- Resolutions supported:
 - XGA, SVGA, VGA, CIF, QVGA, QCIF, 4CIF

Networking Specifications Standards Supported

- ITU-T: H.323 v4.2
- H.281 Annex Q (FECC)
- ISDN: H.320, H.221, H.242, H.230

H.323 QoS Features

- DiffServ
- IP Precedence
- Firewall port sync
- NAT IP address mask
- Port pinholing
- Adaptive Bandwidth Adjustment
- Packet loss recovery (FEC)
- Packet ordering
- Packet duplication control
- Jitter correction
- Lip sync correction
- Overhead prediction
- Max packet size adjustment

**Peripheral Specifications
Pan-Tilt-Zoom Camera
Unit**

Picture – 1/4-color CCD
Focal length – 3.1 mm to 31 mm
Pan-Tilt range -+/-100° Pan,+/-25° Tilt
Zoom range – 10x (optical), 40x(digital)
Horizontal resolution
460 TVL (PAL), 470 TVL (NTSC)

Monitors Configurations

Single DVI, VGA or TV
Dual: DVI + VGA
Dual: VGA + TV
Dual: DVI+TV

**Features Specifications
Dialing Modes**

Manual
Speed dial
Personal address book
Online directory
Multicast chair
Broadcast viewer
Telnet API for AMX/Crestron

Security

Encryption using H.235 (AES)
SecureConnect
DES, 3DES and AES support
AES is NIST validated
Frontier
- Firewall traversal
- Network address translation
Supports restricted access to users via admin

Control

International remote control
Embedded web-based management

Environmental

0 - 40° C temperature
15 – 80% humidity
Universal power supply
Operating voltage: 120V or 230V
Operating frequency: 50 Hz or 60 Hz

TECHNICAL SPECIFICATIONS FOR 46" PROFESSIONAL DISPLAY – QTY ONE NO.

Display:

Screen Size 46 Inches
Resolution 1920x1080 (16:9)
Brightness 700 cd/m2
Contrast Ratio 3000:1
Pixel Pitch 0.53025(H) * 0.53025(V)
Colors support 8 bit - 16.7M

Signal Input:

Video Signal Analog D-SUB, DVI-D, Display Port, CVBS, HDMI1,HDMI2

Power:

Power Consumption 250W(max) / 230W(typ)
Power Supply AC 100 - 240 V~ (+/- 10 %), 50/60 Hz
Stand By Power(DPMS) less than 2W

Sound:

Speaker Type Built in
Sound output(RMS) 10W x 2

Operation Conditions :

Temperature 0°C~ 40°C
Humidity 10~80%

Features :

Special Features Lamp Error Detection, Brightness Sensor, Anti Retention,
Temperature Sensor, RS232C/RJ45 MDC ,Built in Speaker (10W + 10W),Plug and
Play (DDC2B), PIP/PBP, Video Wall(10x10), Pivot Display, Button Lock, Digital
Daisy Chain, Smart Scheduling, Smart F/W update

BHAVNAGAR UNIVERSITY
BHAVNAGAR

TERMS AND CONDITIONS FOR "VIDEO CONFERINCING SOLUTION " IN UNIVERSITY
The Technical Specification for above as well as requirements are enclosed herewith

- (1) Price Should be inclusive of all taxes transportation -installation & training
- (2) Rs.25,000 /has to be deposited towards tender deposit along with tender by bank draft in favour of The Registrar Bhavnagar University , Or by cash during Monday to Friday from 11-00 to 15-30 Hrs. & from 11.00 to 12.30 on saturday.
- (3) The last date of submitting the tender is Dt: 11-03-2011 to Dt: 22-03-2011 to General Section, Administratative Building Bhavnagar University ,Bhavnagar in sealed cover along with Deposit.Tender received after given time limit will not be considered.in any case
- (4) Vendor should enclose all the literature , catalogue , customer list etc. with the tender.
- (5) Only reputed vendors having Tax Identification No. (which should be quoted clearly in the tender with the date of Registration) and having well established after sales service net work in Bhavnagar city will be considered. Please provide details of turn over , no of persons employed with their qualification and experience.
- (6) Subject to Bhavnagar jurisdiction
- (7) All technical details must be supported by relevant documents, brochures, pamphlets, technical literature. Any tender submitted without all technical details will be rejected .
- (8) The tenderer should have supplied Product amounting 3 times than the tender amount in last 3 years. The tenderer should enclose relevant purchase order/ work order as a proof along with the tender failing to which the tender will be rejected.

- (9) Payment will be made only after satisfactory installation and working .
- (10) In case of interpretation of any claim or in case of dispute, the decision of Registrar Bhavnagar University will be final and binding to both the parties .
- (11) All Rights to accept/ partly accept / reject/ modify the tender lies with Registrar , Bhavnagar University.
- (12) Academic discount should be mentioned clearly, & separately, if any.
- (13) A performance bank guarantee will have to be given. The value of bank guarantee shall be 10 % of the Product cost..
- (14) All pages of tender should be duly signed .

We have read the above terms and conditions and we agree to these

Name of the Party:

Address:

Tax Identification No.:-

Authorised Signature

Encl: Technical Specification

BHAVNAGAR UNIVERSITY
BHAVNAGAR
Tender Notice for Video Conferencing Facility
No. 03/2011

Bhavnagar University invites tender for "**VIDEO CONFERINCING FACILITY**" from experienced Vendors Providing such products who have supplied products costing 3 times than the tender amount of products during last 3 years.The tender document costing Rs.2000/(Non refundable) may be obtained from Bhavnagar University from 11.00 a.m.to 3.30 p.m. on working days and 11.00 am to 12.30 p.m. on Saturday.from Dt:11/03/2011 to Dt:22-03-2011 either by paying cash or D.D. (payable to "Registrar,Bhavnagar University,Bhavnagar")Letter on company's letter head for obtaining tender document must contain the name & address with e-mail ,Fax,Phone No. Name of the contract person.

The complete tender must reach to General Section of Bhavnagar University,Bhavnagar on or before Dt:11-03-2011 to Dt: 22-03-2011 with deposit of Rs.25,000/ (Rupees Twenty five Thousand) to be paid D.D. The University Reserves all rights to accept/reject or partially, any or all tenders without assigning any reason to any person whomsoever.

The above tender can be Downloaded From the Bhavnagar University Web site (www.bhavuni.edu.) and submitted alongwith a draft of Rs.2000/- separately.

I/c. REGISTRAR