



TANDBERG Intern MXP

Combining a TANDBERG set-top with an IV stand, the TANDBERG Intern MXP is ideal for applications that require a portable, self-contained video solution, such as healthcare, emergency response, homeland security and manufacturing.

DESIGN FEATURES

- Single 23" 16:9 XGA flat-screen LCD display
- Slim mobile unit with shelf and basket for convenient connection of peripherals such as a laptop, medical imaging equipment and additional cameras
- Industry-leading wide angle view camera with extensive zoom, pan and tilt

APPLICATION FEATURES

- Join up to 4 video and 3 audio sites with optional embedded MultiSite functionality
- Share records or images live through one-step PC plug-in (PC Presenter) or LAN connection (PC SoftPresenter)
- View records or images and an off-site expert or audience simultaneously with either DuoVideo or H.239

PERFORMANCE FEATURES

- Choice of network: IP / ISDN or IP / V.35
- Up to 2 Mbps H.323 / 2 Mbps SIP / 512 kbps H.320 / 2.3 Mbps total MultiSite
- Superior video quality incorporating the H.264 standard
- Highest level of standards-based embedded encryption to meet HIPAA compliance for patient confidentiality regardless of network type
- Tested and listed to UL 2601-1 and CSA 601.1 regulatory standards for approval in patient contact environments
- Wireless capable

UNIT DELIVERED COMPLETE WITH:

Integrated 23" Wide Screen (16:9) LCD, Utility Tray,
Uni-directional low profile microphone, isolation transformer
conforming to UL 2601-1, Private listening headphones,
Internal Network termination unit or V35 Connection***

MONITOR

Wide Screen LCD (16:9)
Wide view angle screen
XGA resolution

BANDWIDTH

H.320 up to 512 kbps***
H.323 up to 2 Mbps***
SIP up to 2 Mbps***
Up to 2.3 Mbps total MultiSite bandwidth***

FIREWALL TRAVERSAL

Firewall traversal with TANDBERG Expressway™
Auto NAT

VIDEO STANDARDS

H.261, H.263, H.263+, H.263++ (Natural Video), H.264

VIDEO FEATURES

Native 16:9 Widescreen
Advanced Screen Layouts
Picture in Picture (PIP)
Picture outside Picture (POP)
Side by Side
PC Zoom
Intelligent Video Management

VIDEO INPUTS (4 INPUTS)

Built-in main camera
1 x MiniDin, S-video; auxiliary / document camera
2 x RCA / Phono, composite; document camera / aux
1 x RCA / Phono, composite; VCR
1 x DVI/SXGA; PC
Input: 800 x 600 (@ 60, 72,75,85 Hz), 1024 x 768
(@ 60, 70, 75 Hz), 1280 x 1024 @ 60 Hz
Extended Display Identification Data (EDID)

VIDEO OUTPUTS (4 OUTPUTS)

1 x MiniDin, S-video; main monitor
1 x RCA / Phono, composite; main monitor or VCR
1 x RCA / Phono, composite; dual monitor or VCR
1 x DVI/XGA; main or second monitor
XGA Output
800 x 600 @ 75 Hz, 1024 x 768 @ 60 Hz, 1280 x
768 (WXGA) @ 60 Hz
VESA Monitor Power Management

VIDEO FORMAT

NTSC, PAL, VGA, SVGA, XGA, W-XGA, or SXGA

LIVE VIDEO RESOLUTION

NATIVE NTSC:

4SiF (704 x 480 pixels), Digital Clarity
Interlaced SiF (352 x 480 pixels) Natural Video
SiF (352 x 240 pixels)

NATIVE PAL:

4CiF (704 x 576 pixels), Digital Clarity
Interlaced CiF (352 x 576 pixels), Natural Video
CiF (352 x 288 pixels)
QCIF (176 x 144 pixels)
SQCIF (128 x 96 pixels) decode only

NATIVE PC RESOLUTION:

XGA (1024 x 768)
SVGA (800 x 600 pixels)
VGA (640 x 480 pixels)

STILL IMAGE TRANSFER

CIF, SiF, 4CiF (H.261 Annex D), 4SiF, VGA, SVGA, XGA

AUDIO STANDARDS

G.711, G.722, G.722.1, G.728, 64 bit & 128 bit MPEG4 AAC-LD

AUDIO FEATURES

CD-Quality 20 KHz Mono and Stereo
Telephone add-on via MultiSite
Four separate acoustic echo cancellers
Audio mixer
Automatic Gain Control (AGC)
Automatic Noise Reduction
Audio level meters
VCR ducking

AUDIO INPUTS (4 INPUTS)

2 x microphone, 24V phantom powered, XLR connector
1 x RCA / Phono, Line Level: auxiliary (or VCR Stereo L)
1 x RCA / Phono, Line Level: VCR/DVD (Stereo R)

AUDIO OUTPUTS (2 OUTPUTS)

1 x RCA / Phono, S/PDIF (mono/stereo) or Analogue Line
Level: main audio
1 x RCA / Phono, Line Level: VCR

FRAME RATES

30 frames per second @ 168 kbps and above
60 fields per second @ 336 kbps and above (Point-to-point)

DUAL STREAM

Duo Video & H.239
Available on H.323 & H.320
Available in MultiSite from any site

NETWORK FEATURES

Auto H.320 / H.323 dialing
SIP
Downspeeding
Programmable network profiles
Intelligent Call Management
Maximum call length timer
Automatic SPID and line number configuration
(National ISDN, GR-2941-CORE)
SoftMux
H.331 Broadcast Mode
NATO standard KG194 / KIV-7 encryptor support***
URI Dialing

MULTISITE FEATURES

H.323/H.320/SIP/Telephony/VoIP in the same conference
Audio and Video Transcoding
Video rate matching from 56 kbps - maximum conference rate
CP4 and Voice Switched
Best Impression (Automatic CP Layouts)
H.264, Encryption, Digital Clarity
Dual Stream from any site
ISDN & IP Downspeeding and IPLR
MultiSite (H.243) Cascading on H.320 & H.323
Dial in / Dial out
MultiSite (H.243) Cascading on ISDN & IP
Dial in / Dial out
Chair control for host system
Snapshot of ongoing conference (JPEG)
Snapshot of ongoing DuoVideo/H.239 presentation (JPEG)
Separate welcome page for encrypted conferences
Conference rates up to 2.3 Mbps with optional bandwidth
upgrade (1.5 Mbps is standard conference rate)
Up to 4 video and 3 audio sites
4 sites @ 768 kbps (+telephone calls)***
Mix ISDN-BRI or V.35 and IP up to maximum conference rate***

EMBEDDED ENCRYPTION

H.320 and H.323 point-to-point and multipoint calls
Standards-based: H.233, H.234, H.235 v2&v3, DES and AES
NIST-validated AES
NIST-validated DES
Automatic key generation and exchange
Supported in Dual Stream & MultiSite

IP NETWORK FEATURES

Differentiated Services (DiffServ)
Resource Reservation Protocol (RSVP)
IP precedence
IP type of service (ToS)
IP adaptive bandwidth management (including flow control)
Auto gatekeeper discovery
Dynamic playout and lip-sync buffering
Intelligent Packet Loss Recovery (IPLR)
H.245 DTMF tones in H.323
Cisco CallManager integration using ECS
IP Address Conflict Warning

SECURITY FEATURES

Management via HTTPS
IP Administration Password
Menu Administration Password
Dialing Access code
Streaming password
H.243 MCU Password
VNC password
SNMP security alerts
Disable IP services
MD-5 Challenge

NETWORK INTERFACES

4 x ISDN BRI (RJ-45), S-interface
1 x LAN / Ethernet (RJ-45) 10/100 Mbit
(LAN / DSL /cable modem)
1 x PC card slot (PCMCIA) for wireless LAN
1 x X.21 / V.35 / RS-449 with RS-366 dialing, Leased Line
or data triggered mode***
1 x USB

WIRELESS LAN SUPPORT**

Compliant with IEEE 802.11b, up to 11Mbit
Support for 64/128bit encryption (WEP)
Infrastructure or ad-hoc mode

ETHERNET / INTERNET / INTRANET CONNECTIVITY

TCP / IP, DHCP, ARP, FTP, Telnet, HTTP, HTTPS, SOAP and
XML, MD-5 Challenge
SNMP Enterprise Management
Internal web server
Internal streaming server

OTHER MAJOR STANDARDS SUPPORTED

H.231, H.233, H.234, H.235, H.235 v2&v3, H.239,
H.241, H.243, H.281, BONDING (ISO 13871), H.320,
H.323, H.331, RFC 3261, RFC 2237, RFC 3264, RC 3311,
RFC 3550, RFC 2032, RFC 2190, RFC 2429, RFC 3407

W.A.V.E. (WIDE ANGLE VIEW) II CAMERA

10 x zoom 1/4" CCD +15° / -20° tilt
+ / -95°pan
61° vertical field of view
96° total vertical field of view
77° horizontal field of view
267° total horizontal field of view
460 (PAL) / 470 (NTSC) TV lines
Min. illumination 2 Lux (F1.8)
Auto or manual focus / brightness / white balance
Far-end camera control
15 near and far-end camera pre-sets
Voice-activated camera positioning

CLOSED CAPTIONING/TEXT CHAT

T.140 text chat, available from RS-232, Telnet or Web

PRESENTATIONS AND COLLABORATION

Natural Presenter Package including:
PC Presenter (DVI-I, SXGA In)
PC SoftPresenter
Digital Clarity & Native Formats
Advanced Video Layouts
Streaming compatible with Cisco IP/TV,
Apple QuickTime®, RealPlayer® v8 etc.

SYSTEM MANAGEMENT

Support for the TANDBERG Management Suite
Total management via embedded web server, SNMP,
Telnet, XML, SOAP and FTP
Remote software upload :via web server or FTP server
1 x RS-232 local control and diagnostics
Remote control and on-screen menu system

DIRECTORY SERVICES

Support for Local, Global and Dynamic Server Directories
Unlimited entries using Server directory* supporting
LDAP and H.350
400 number global directory
100 number local directory
16 dedicated MultiSite entries
Last Number Called
Missed Calls
Directories in Local Languages

13 SELECTABLE MENU LANGUAGES

Simplified Chinese, Traditional Chinese English,
French, German, Italian, Japanese, Korean, Norwegian,
Portuguese, Russian, Spanish and Swedish

CUSTOMIZED BOOT UP LOGO (JPEG)

POWER

120 / 240 VAC, 50 - 60 Hz
600 VA max
Aux AC output: 120 / 240 VAC, 50 - 60 Hz 165 watts

OPERATING TEMPERATURE AND HUMIDITY

Ambient Temperature
Humidity: 30% to 85% Relative Humidity
Storage and Transport: -10 to 40°C (14 to 140°F) at RH
10-90% (non condensing)
Type: Non Classified
Approvals: UL2601-1, CSA 601.1, Class 1 FCC-A, CE (220 VAC)

DIMENSIONS

Diameter (base): 26" / 66 cm
Height: 66" / 168 cm
Weight: 110 lbs / 50 kg

* Requires TANDBERG Management Suite 9.0 or newer

** Important Note: The conformance of the Intern II
does not include operations using a wireless LAN as
TANDBERG has no control of the EMC emissions of the
selected card.

*** Optional equipment, Must specify set top model
(990 MXP or 880 MXP) and network type (BRI or V.35)

Please consult your internal bio-medical engineer for
clarification of acceptability of wireless LAN operation
within specific medical environments.

System features vary depending on network selection
and software package. All specifications subject to
change without notice.

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