



TANDBERG  
 Utility  
 MXP

Robust, fully-integrated solution designed for demanding environments. Users easily communicate from correctional facilities, manufacturing floors or university campuses with simple auto-dial capability.

**DESIGN FEATURES**

- Designed for rugged applications in demanding environments
- Completely integrated system including camera, display, handset, speakers and microphone
- Built-in LED light source for improved video image quality
- Wall-mounted with a VESA 100 compliant interface
- Built in key lock to secure system

**APPLICATION FEATURES**

- View presentations and presenter simultaneously with DuoVideo and H.239 Dual Stream
- TANDBERG Expressway™ Technology
- Auto-dial and accept calls when handset is lifted

**PERFORMANCE FEATURES**

- Choice of Network: up to 384 kbps ISDN/768 kbps IP (H.323 or SIP)
- Superior video quality incorporating the H.264 standard
- Highest level of embedded encryption as well as IEEE 802.1x and H.235 authentication for security
- IPv6 support
- Protection against network interruptions with automatic Downspeeding and IPLR
- XGA LCD Screen

PROTECT YOUR TECHNOLOGY INVESTMENT WITH TANDBERG'S PORTFOLIO OF **CONSTANT CARE SERVICES**. VISIT [WWW.TANDBERG.NET](http://WWW.TANDBERG.NET)

#### UNIT DELIVERED COMPLETE WITH:

Built-in camera, microphone, speakers, cables,  
12.1" LCD screen, LED light source, telephone handset,  
wall-mount bracket, remote control

#### LCD SCREEN

Wide view angle screen  
XGA resolution  
Auto brightness

#### BANDWIDTH

H.320 up to 384 kbps  
H.323 up to 768 kbps  
SIP up to 768 kbps

#### FIREWALL TRAVERSAL

TANDBERG Expressway Technology™  
Auto NAT  
H.460.18, H.460.19 Firewall Traversal

#### VIDEO STANDARDS

H.261, H.263, H.263+, H.264

#### VIDEO FEATURES

Intelligent Video Management  
Picture in Picture (PIP)  
Dual Monitor Emulation (Side by Side)

#### VIDEO INPUTS (1 INPUT)

Built-in main camera  
Extended Display Identification Data (EDID)

#### VIDEO FORMAT

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

#### LIVE VIDEO RESOLUTIONS

##### NATIVE NTSC:

400p (528 x 400 pixels) receive only  
4SIF (704 x 480 pixels), Digital Clarity  
Interlaced SIF (iSIF 352 x 480 pixels), Natural Video  
SIF (352 x 240 pixels)

##### NATIVE PAL:

448p (576 x 448 pixels) receive only  
4CIF (704 x 576 pixels), Digital Clarity  
Interlaced CIF (iCIF 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 RESOLUTIONS:

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

##### WIDE RESOLUTIONS:

w288p (512 x 288 pixels) receive only  
w448p (768 x 448 pixels) receive only  
w720p (1280 x 720 pixels) receive only

#### 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 MPEG4 AAC-LD

#### AUDIO FEATURES

CD-Quality 20KHz Mono  
Automatic noise reduction  
Acoustic echo canceller  
Automatic gain control  
Packet loss management  
Active lip synchronization  
GSM/Blackberry interference audio feature

#### PRIVACY FEATURE

Armored Telephone Handset  
Camera cover

#### FRAME RATES

30 frames per second @ 168 kbps and above

#### DUAL STREAM

DuoVideo  
H.239 dual stream  
Dynamic bandwidth adjustment (H.323)  
Available on H.323 & H.320

#### 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

#### EMBEDDED ENCRYPTION

H.320 and H.323 point-to-point 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

#### IP NETWORK FEATURES

IEEE 802.1x/EAP Network Authentication  
H.235 Gatekeeper Authentication  
DNS lookup for service configuration  
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  
Date and Time support via NTP  
Call Services

#### IPv6 NETWORK SUPPORT

Dual Stack IPv4 and IPv6 simultaneous support  
Net service support on IPv6: Telnet, SSH, HTTP, HTTPS,  
ftp, SNMP, DNS, NTP, DHCP  
Media support on IPv6: H.323, SIP Streaming

#### SECURITY FEATURES

Management via HTTPS and SSH  
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 settings protection  
SIP Authentication via NTLM  
SIP Authentication via Digest

#### NETWORK INTERFACES

3 x ISDN BRI (RJ-45), S-interface  
1 x LAN/Ethernet (RJ-45) 10/100 Mbit  
(LAN/DSL/cable modem)  
1 x USB for future usage

#### 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 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

#### CAMERA

1/4" CCD  
752(H) x 582(V) resolution  
Lens: f=4mm F1:1.2  
64° horizontal field of view  
49° vertical field of view  
Minimum illumination 5.0 lux (video output 50%, AGC on)

#### CLOSED CAPTIONING/TEXT CHAT

T.140 text chat available from Telnet,  
Web and User Interface

#### PRESENTATIONS AND COLLABORATION

Natural Presenter Package including:  
Digital Clarity & Native Formats  
Dual Monitor Emulation (Side by Side)  
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, SSH, FTP and SOAP  
Remote software upload: via web server, ftp server or ISDN

#### DIRECTORY SERVICES

Support for Local directories (My Contacts),  
Corporate Directory and Global Directory  
Unlimited entries using Server directory\* supporting LDAP  
and H.350  
Unlimited number for Corporate directory (through by TMS)  
400 number global directory  
200 number local directory  
Directories in Local Languages

#### 16 MENU LANGUAGES AVAILABLE

Arabic, Simplified Chinese, Traditional Chinese, English,  
French, German, Italian, Japanese, Korean, Norwegian,  
Portuguese, Russian, Spanish, Suomi, Swedish and Thai  
Chinese, Korean and Japanese Input Method Editors  
Import Custom Language through TMS

#### CUSTOMIZED WELCOME SCREEN AND COMPANY LOGO

Pictures JPEG (logo.jpg): Recommended maximum size is  
704x576 for Welcome Screen and 352x288 for the other screens

#### POWER

Auto-sensing power supply  
100-250 VAC, 50-60 Hz  
36 Watts max.

#### OPERATING TEMPERATURE AND HUMIDITY

0° C to 35° C (32° F to 95° F) ambient temperature  
10% to 90% Relative Humidity (RH)

#### STORAGE AND TRANSPORT TEMPERATURE

-20° C to 60° C (-4° F to 140° F) at RH 10-90%  
(non-condensing)

#### APPROVALS

Directive 73/23/EEC (Low Voltage Directive)  
– Standard EN 60950  
Directive 89/336/EEC (EMC Directive)  
– Standard EN 55022, Class B  
– Standard EN 55024  
– Standard EN 61000-3-2/-3-3  
Directive 1999/5/EEC (R&TTE Directive)  
– Standard TBR3  
Approved according to CAN/CSA C22.2 No. 60950-1  
Complies with FCC15B Class B

#### UNIT DIMENSIONS

Height: 21.1"/53.6 cm  
Width: 14.4"/36.5 cm (without handset)  
Depth: 3.7"/9.5 cm  
Weight: 23.1 lbs/10.5 kg

*\*Requires TANDBERG Management Suite 9 or newer*

*All specifications subject to change without notice,  
system specifics may vary.*

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purposes only, actual products may differ.*

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trademarks of TANDBERG in the U.S. and other countries.*

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#### MTBF PRODUCT RELIABILITY/MTBF

*The predicted reliability is expressed in the expected  
random Mean Time Between Failures (MTBF) for the  
electronic components based on the Power On Hours:  
Power On Hours (POH) > 69 000 hours  
Useful Life Cycle > 6 years  
ISO 9001 certificate is available upon request*

## TANDBERG

# Utility MXP

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