



TANDBERG E20

TANDBERG is reinventing the desk phone by merging voice, video and collaboration into one device. A highly scalable solution for enterprise mass deployment, everyone in the organization will immediately see the benefits of increased productivity and daily collaboration.



DESIGN FEATURES

- Attractive Scandinavian design
- Superior quality IP telephone with advanced features
- Intuitive user interface and keypad for quick access to all IP phone and video services
- Wideband 10 kHz handset
- Easy to deploy and manage

APPLICATION FEATURES

- Video and voice for every desk
- Scalable for enterprise mass deployment
- Richer collaboration than only phone calls can provide
- Unite remote workers and other members of the organization
- Scale expertise across the organization
- Familiar IP telephone features such as a message waiting indicator/button
- Handset, headset, speakerphone flexibility

PERFORMANCE FEATURES

- Ultra wideband 20 kHz speaker phone
- TANDBERG acoustic echo cancellation
- High-resolution TANDBERG camera with integrated privacy shutter
- DVD quality, w448p video resolution
- 10.6" wide format LCD display with WXGA resolution
- Bandwidth — SIP up to 1152 kbps
- Firewall traversal through TANDBERG Video Communications Server (VCS) Expressway

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FULLY INTEGRATED UNIT INCLUDING:

LCD screen, camera, microphone, loudspeaker, keypad and handset
 Delivered with power supply/cable and Ethernet cable.

LCD SCREEN

10.6" wide viewing angle screen
 WXGA (1280x768)
 Manual brightness, contrast, color RGB

CAMERA

TANDBERG custom camera design
 1/2.5" CMOS sensor
 Aperture F2.7
 50° Horizontal field of view
 29° Vertical field of view (39° total)
 +5°/-5° digital tilt
 Manual focus
 Focus distance 0.3m-infinity
 1280 x 720 progressive @30 fps
 Automatic frequency detection (PAL/NTSC)
 Automatic and manual brightness/white balance

BANDWIDTH

SIP up to 1152 kbps

VIDEO STANDARDS

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

VIDEO FEATURES

Native 16:9 Widescreen
 Picture in Picture (PIP)

VIDEO RESOLUTIONS AND FRAME RATES

TRANSMIT AND RECEIVE:

768 x 448@30fps (w448p)
 576 x 448@30fps (448p)
 512 x 288@30fps (w288p)
 352 x 288@30fps (CIF)
 176 x 144@30fps (QCIF)

RECEIVE ONLY:

1280 x 768@7,5fps (WXGA)
 1024 x 768@7,5fps (XGA)
 1024 x 576@7,5fps (w576)
 800 x 600@7,5fps (SVGA)
 704 x 480@15fps (4SIF)
 704 x 480@15fps (4CIF)
 640 x 480@15fps (VGA)
 352 x 240@30fps (SIF)

AUDIO STANDARDS

MPEG4 AAC-LD, G.729ab, G.722, G.722.1, G.711

AUDIO FEATURES

Ultra wideband 20 kHz speaker phone
 Wideband 10 kHz handset
 RJ11 headset port
 TANDBERG acoustic echo cancellation
 Automatic Gain Control (AGC)
 Automatic Noise Reduction
 Packet loss management
 Active lip synchronization

PRIVACY FEATURES

Camera with integrated privacy shutter
 Video mute button with backlight indicator and far-end video mute indication
 Audio mute button with backlight indicator and far-end audio mute indication
 Headset button with backlight indicator

USER INTERFACE

On-screen graphic user interface
 Navigation cluster with select button
 Message waiting indicator/button
 5 contextual soft keys

DUAL STREAM

Receive DuoVideo on SIP BFCP

FIREWALL TRAVERSAL

Through TANDBERG Video Communications Server (VCS)

EMBEDDED ENCRYPTION

AES with SRTP and TLS
 Automatic key generation and exchange

IP NETWORK FEATURES

Differentiated Services (DiffServ)
 Dynamic play out and lip-sync buffering
 Intelligent Packet Loss Recovery (IPLR)
 Maximum call length timer
 IP Address Conflict Warning
 URI Dialing
 DNS lookup for service configuration
 Date and Time support via NTP

IP NETWORK SUPPORT

IPv4

SECURITY FEATURES

IP Administration Password
 Menu Administration Password
 Embedded encryption (AES)
 Call status light indication
 SIP Authentication via NTLM
 SIP Authentication via Digest
 Management via HTTPS and SSH

NETWORK INTERFACES

Internal 2-port Ethernet switch
 1 x LAN/Ethernet (RJ-45) 10/100/1000 Mbit for PC
 1 x LAN/Ethernet (RJ-45) 10/100/1000 Mbit for LAN

AUXILIARY INTERFACES

USB host port for future applications
 Bluetooth module for future applications

ETHERNET /INTERNET /INTRANET CONNECTIVITY

TCP/IP, DHCP, ARP, SNMP, SSH, SCP, SOAP and XML
 Internal Web server, HTTP, HTTPS

CLOSED CAPTIONING

TTY (Telephone Text) support via handset

SYSTEM MANAGEMENT

Support for the TANDBERG Management Suite
 SSH, XML, SOAP, SNMP
 Remote software upload via Web server or SSH/SCP

DIRECTORY SERVICES

Support for Local Directories (My Contacts)
 Support for Server Directory via TMS*
 Received, Placed and Missed Calls with Date and Time

POWER

Auto-sensing power supply
 100-240 VAC, 50-60 Hz
 24 watts max

OPERATING TEMPERATURE AND HUMIDITY

0° C to 35° C (32° F to 95° F) ambient temperature
 10% to 80% Relative Humidity (RH)

STORAGE AND TRANSPORT TEMPERATURE

-20° C to 60° C (-4° F to 140° F) at RH 10-80% (non-condensing)

APPROVALS

Directive 2006/95/EC (Low Voltage Directive)
 — Standard EN 60950-1 2nd ed
 Directive 89/336/EEC (EMC Directive)
 — Standard EN 55022, Class B
 — Standard EN 55024
 — Standard EN 61000-3-2/-3-3
 Approved according to UL 60950-1 2nd ed and CAN/CSA C22.2 No. 60950-1-07 2nd ed
 Complies with FCC15B Class B

UNIT DIMENSIONS

Height: 34.7 cm (13.7 inches)
 Width: 31.6 cm (12.4 inches), 27.7 cm (10.9 inches) without handset cradle
 Depth: 17.0 cm (6.9 inches)
 Footprint: 17.0 cm x 31.6 cm (6.68 inches x 7.3 inches)
 Weight: 1.9 kg (4.2 lbs)

**Requires TANDBERG Management Suite version 12 or newer*

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

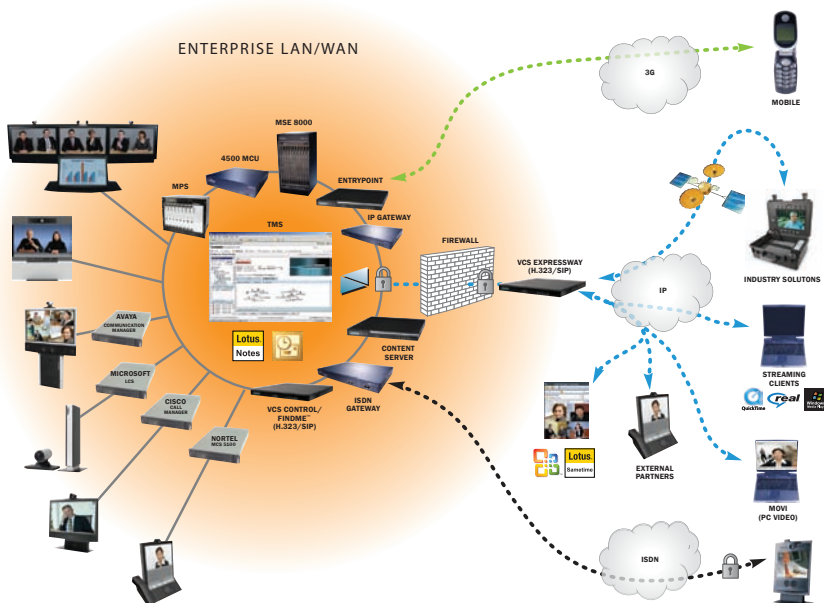
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MTBF PRODUCT RELIABILITY/MTBF

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



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E20**

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