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

TANDBERG

See: performance

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 (1280×768)
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 (ACG)
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 UNTERFACE
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)

ENTERPRISE LAN/WAN

TANDBERG

E20

TANDBERG
See: performance