

Poly Edge E450 IP Phone and PoE-enabled

Designed for the new way you work

This desk phone makes hybrid work easy. Built for hot-desking or the home office, these phones offer the perfect user experience. Two displays and 14-line keys give you more ways to connect, plus quality audio, in a seriously sharp package.



*Product image may differ from actual product

The new office standard

The perfect desk phone for the modern office, the Poly Edge E400 Series is packed with features and contacts. These phones pair Poly noise reduction technology with cutting-edge design that brings style to any desktop.

Integrated protection

Rest assured that your devices, enhanced with Microban® antimicrobial product protection, stay cleaner, fresher, and more durable for longer. Protection that lasts the life of the product, actively reducing the growth of bacteria 24/7¹.

Enterprise-quality sound

The Poly E400 Series offer quality audio with Poly HD voice and bass frequency enhancing speaker design. They reduce noise and distractions with Poly NoiseBlockAI and Acoustic Fence technologies.

All the features you need

Get fast access to features via the main 3.5" color display with a surround light status indicator with 8-line keys supporting 32 lines. Speed dialing is a breeze with a second integrated 2.4" display with 6-line keys.

Versatile connectivity

Enjoy better connectivity with two high-speed GigE PoE Ethernet ports for the LAN connection to your IP phone with a passthrough connection to your PC. And a Poly headset for your workstyle: Bluetooth®, USB, RJ9, or Electronic Hook Switch.²

Perfectly paired

Integrated Bluetooth® 5.0 gives you freedom to move about the office with your Poly Bluetooth® headset and answer your mobile phone calls from your desk phone. Fast pairing on selected Poly headsets makes connecting your headset easy.²

Works wherever you do

The Poly Edge E450 is Wi-Fi-ready for hassle-free performance at home or office. Work anywhere with 802.11AC Wi-Fi included. With simple out-of-the-box Wi-Fi configuration, this phone gives you peak performance anywhere you've got a signal.³

Datasheet

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Specifications



Display

Aspect ratio: 16:9 (primary); 9:16 (secondary)
Native resolution: 320 x 240 (primary); 240 x 320 (secondary)
Panel technology: Color IPS LCD
Display size (diagonal, metric): 8.9 cm (3.5") (primary); 6.1 cm (2.4") (secondary)

Connectivity and communications

External I/O ports:
 1 USB 2.0 Type-C® (for media, storage applications, headset, expansion module)
 2 RJ-45 (10/100/1000BASE-TX Mbps)
Wireless technologies:
 Bluetooth® 5.0
 Wi-Fi network connectivity: 2.4-2.4835 GHz (802.11b, 802.11g, 802.11n HT-20)
 5.15-5.825 GHz (802.11a, 802.11n, HT-20, 802.11n HT-40)
 NFC³

Battery

Power features:
 13 W (maximum)
 Built-in auto-sensing IEEE 802.3af Power over Ethernet (Class 4)^{2,4}

User interface features

Languages:
 Arabic; Chinese; Czech; Danish; Dutch; English; French; German; Hungarian; Italian; Japanese; Korean; Norwegian; Polish; Portuguese; Romanian; Russian; Slovenian; Spanish; Swedish

Audio

Audio features:
 Poly HD Voice
 Poly Acoustic Clarity technology provides full duplex conversations, acoustic echo cancellation, and background noise suppression
 Poly Acoustic Fence technology eliminates background noise when using a handset or wired headset
 Poly NoiseBlock AI technology removes most background noise when using the speakerphone
 Poly Computer Audio Connector app installed on your PC (Windows only) enables selecting your phone for PC audio in/out to use the phone's handset, optional headset and handsfree speakerphone with PC applications
 Bass frequency enhancing design
 TIA-920 wideband audio, type 1 compliant (IEEE 1329 full duplex)
 Individual volume settings with visual feedback for each audio path
 Voice activity detection
 Comfort noise generation
 DTMF tone generation (RFC 2833 and in-band)
 Low delay audio packet transmission
 Adaptive jitter buffers
Frequency response (microphone): 150 Hz to 14 kHz
Audio codecs:
 G.711 (A-law and μ-law)
 G.722
 G.729AB
 iLBC
 OPUS
 G.722.1

Environmental

Certifications and compliances: AS/NZS 4268; Australia RCM; Brazil ANATEL; CISPR22 Class B; EEA; EN55024; EN55032 Class B; EN 301 489-1; EN 301 489-3; EN 301 489-17; ETSI EN 300 328 v1.9.1; ETSI EN 301 893 v1.7.1; FCC Part 15 (CFR 47) Class B; FCC Part 15.247; FCC Part 15.407; ICES-003 Class B; Israel MOC; Japan MIC/VCCI; Japan Item (19)-3; Japan Item (19)-3-2; Malaysia SIRIM; NZ Telepermit; Saudi Arabia CTC; Singapore IMDA; So. Africa ICASA; So. Korea KC; UAE TRA; Argentina ENACOM; Canada ICES; Canada-RSS 247 Issue2; China SRRC; China RoHS 2.0; Eurasian Customs Union EAC; India WPC; Indonesia SDPP; Mexico IFETEL and NYCE; Taiwan NCC; UK - UKCA; USA FCC
Operating humidity range: 5 to 95%
Operating Temperature Range (Celsius) / Operating Temperature Range (Fahrenheit): 0 to 40°C /
Storage temperature range (Celsius) / Storage temperature range (Fahrenheit): -40 to 70°C /
Energy star certified: ENERGY STAR® certified

Certifications

Special features:
 Unicode UTF-8 character support
 Adjustable desk stand (2 positions)
 Second display with 6 keys supporting up to 12 contacts⁵

Applications supported

Management software:
 Poly Zero Touch Provisioning
 Poly Lens
 Polcom Device Management Service for Service Providers (PDMS-SP) Cloud Management SDP

Display features

Lightbar status indicator (RGB with color mixing)

Security

Security management:
 802.1X Authentication and EAPOL Media encryption via SRTP
 Digest authentication
 Encrypted configuration files
 HTTPS secure provisioning
 Password login
 Support for signed software executables
 Support for URL syntax with password
 Transport Layer Security (TLS)
 Wi-Fi encryption: WEP; WPA-Personal; WPA2-Personal; WPA2-Enterprise with 802.1X (EAP-TLS, PEAP-MSCHAPv2)
 SRTP media encryption using AES 256 bits

Network

Supported network protocols:
 DHCP VLAN discovery
 LLDP-MED for VLAN discovery
 FTP/TFTP/HTTP/HTTPS server-based central provisioning
 Hardware diagnostics
 Manual or dynamic host configuration protocol (DHCP) network setup
 Network address translation support for static configuration and Keep-Alive
 QoS Support – IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS, and DHCP
 Status and statistics reporting
 Syslog Event Logging
 Conforms to IEEE802.3-2005 (Clause 40) for physical media attachment
 Conforms to IEEE802.3-2002 (Clause 28) for link partner auto-negotiation
 Time and date synchronization using SNTP
 RTCP and RTP support
 IPv4
 IPv6
 Provisioning and call server redundancy support
 DNS-SRV
 UDP
 SIP protocol support
 IETF SIP (RFC 3261 and companion RFCs)
VoIP features:
 8 line keys supporting up to 32 SIP lines with pagination

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Specifications



Headset and handset compatibility

Headset ports:

1RJ-9

1Electronic Hook Switch (EHS) port for optional APP-51 adapter

Headset and handset compatibility:

Compatible with commercially available TTY adapter equipment

Compliant with ADA Section 508 Subpart B 1194.23 (all)

Hearing aid compatibility to ITU-TP.370 and TIA 504A standards

Hearing aid compatible (HAC) handset for magnetic coupling to hearing aids

USB Type-C[®] headset support

Telephony and call handling features

Telephony and call handling features:

4 context-sensitive soft keys

4 way navigation key cluster with center Select key

Bundled with Polycom UC Software: Corporate Directory Access using LDAP

Busy Lamp Field (BLF)

Call timer and call waiting

Call transfer, hold, divert (forward), park, pickup

Called, calling, connected party information

Calling Party Identification (RFC8225 classifications – Trusted, Unknown, SPAM)

Distinctive incoming call treatment/call waiting

Do not disturb function

Electronic hook switch capable

Enhanced Feature Keys make powerful feature shortcuts online key appearances or soft keys

Headset select key (illuminated when selected)

Hold and transfer keys

Home and back feature keys

Local three-way audio conferencing

Local configurable digit map/dial plan

Mute key (illuminated when muted)

One-touch speed dial, redial

Pagination key for additional lines/contacts

Remote missed call notification

Reverse number lookup via LDAP

Shared call/bridged line appearance

Speakerphone select key (illuminated when selected)

Supports Polycom Apps SDK and API for third-party business and personal application

Visual Conference Management

Vicemail key

Volume +/- control keys

Flexible line appearance (one or more line keys can be assigned for each line extension)

14 line keys (arranged 8+6 on two displays) supporting up to 44 line key assignments for lines, contacts, and features with pagination¹

Weight and dimensions

Product Primary Color: Black

Package dimensions (metric): 25.8 x 30.6 x 8.9 cm

Package Weight (metric): 1110 g

Product number: 82M90AA

Country of origin

Country of origin: Made in China

Warranty

Poly standard one-year limited warranty

What is in the box

Setup sheet

Network (LAN) cable-CAT-5E

Desk stand

Console with Microban[®] Antimicrobial protection

Handset with Microban[®] Antimicrobial protection

Handset cord

Key Selling Points Footnotes

¹ Microban antimicrobial product protection available for the Poly Edge E Series phones protects the entire phone except for the handset cord. Microban antimicrobial product protection is a built-in active ingredient that enables products to resist the growth of microbes such as bacteria, mold, and mildew. Microban protection helps products stay cleaner, fresher, and last longer than products with untreated surfaces. ² Poly headsets sold separately. Poly Electronic Hook Switch (EHS) sold separately. ³ Poly Edge E Series phones connecting via Wi-Fi must be powered by an optional power supply unit when not powered via PoE. ⁴ Plug one (1) Poly Edge E expansion module for up to 66 additional contacts on the Poly Edge E450 IP desk phones.

Technical Specifications Footnotes

¹ Most software-enabled features must be supported by the service provider platform. Please contact your IP PBX/softswitch vendor or service provider for a list of supported features. ² External universal AC/DC adapter, 5 VDC, 3 A, 15 W (sold separately). Power supply unit (PSU) sold separately. ³ NFC-enabled Edge E series phones allow third-party applications to read serial number and other device information that can be useful in application development such as guest login for phone hoteling. ⁴ Ordering an optional power supply unit will be necessary if not powered over ethernet with PoE (i.e. using Wi-Fi for network). ⁵ Optional wall mount kit can be ordered separately.