



D785 / D785N

The next generation of VoIP

The IP desk phone D785 offers the highest demands and intuitive ease of use with its elegant, timeless and modern design, its large high-resolution colour display, its second function key display and the revised user interface. Thanks to the latest technical know-how "Engineered in Germany", a previously unattained HD audio quality is possible. The integrated Bluetooth interface allows headsets to be connected wirelessly.



Bluetooth
(Not D785N)



USB port



Power over
Ethernet
(PoE)



IPv6 & IPv4



Gigabit
Ethernet



Expansion
Module
connectable



Headset
connectable



Self-
Labeling
keys



Security
(TLS &
SRTP)



OpenVPN



HD audio

Technical Specifications

Basics

- Operating system Linux
- Wall mountable
- **Product numbers**
- D785 | black | PN 00004349
- D785 | white | PN 00004392
- D785N | black | PN 00004599

Dimensions and weight

- **Dimensions** (L x W x H, approx.)
- 230 mm x 205 mm x 90 mm w/o footstand
- 190 mm x 205 mm x 200/220 mm with footstand
- **Weight** (approx.) · 990 g with footstand
- 750 g w/o footstand
- **Inclination**
- High angle 46° · Low angle 28°

Display and indicators

- **Display**
- TFT liquid crystal display (LCD), true colour, backlit
- Display size (W x H) 95 mm x 53.9 mm · 4.3" (109 mm) display size (diagonal)
- Resolution 480 x 272 pixel
- **Function key display**
- TFT liquid crystal display (LCD), monochrome, graphic
- Display size (W x H) 66 mm x 23 mm · 2.8" (70 mm) display size (diagonal)
- Resolution 254 x 100 pixel
- **11 LED indicators**
- 1 red LED for call status indication
- 1 red LED for message waiting indication (MWI)
- 6 multicolour LEDs for function key indication
- 3 LEDs (1 red / 2 green) for audio key indication

Audio devices, codecs and features

- **Headset connectivity 4**
- USB headset via USB
- Wired headset via RJ9-4P4C
- Compatible wireless headset via EHS
- BT headset via integrated Bluetooth1
- **Corded receiver**
- Hearing Aid Compatible (HAC)
- **Audio codecs**
- G.711 (A-law, μ -law), G.722, G.726, G.729, GSM 6.10 (FR)
- **Dual-tone multi-frequency signalling (DTMF)**
- in-band, out-of-band, SIP-INFO
- **Related features**
- Built-in assignable ringtones
- Comfort Noise Generator (CNG)
- Voice Activity Detection (VAD)

Technical Specifications

Keypad and function keys

- 42 hard keys in total
- Standard ITU telephone keypad: 12 keys with star and pound/hash key
- 5-way navigation key
- 4 context-sensitive function keys
- **Programmable line / function keys**
- 6 self-labelling keys with multicolour LED
- Multiple key occupancy up to 24 functions on 4 pages
- **5 dedicated audio keys**
- Mute (with red LED), Speakerphone (with green LED), Headset (with green LED), Volume + / - (rocker)
- **10 dedicated function keys**
- Ok, Cancel, DND, Message (with red LED), Directory, Menu, Transfer, Hold, PFK page (rocker)
- **Related features**
- Keyboard lock

Interfaces and connections

- **D785 / D785N power options**
- Power over Ethernet (PoE), IEEE 802.3af, class 3
- Power adapter: 100 - 240 V AC / 50 - 60 Hz
| 5 V DC (SELV) / 2 A / 10 W2
- **Wired interfaces**
- 1 coaxial power adapter connector
- 2 RJ45-8P8C Gigabit Ethernet ports
- 1 USB 2.0 type A port for USB headsets and other accessories 4
- 1 RJ9-4P4C standard connector for corded receiver
- 1 RJ9-4P4C standard connector for wired headset connection2
- 1 RJ12-6P6C EXT connector for Snom EHS adapter
- Expansion module connection via USB port for up to 3 D7 / D7C2
- **Wireless interfaces**
- Bluetooth 4.0 class 21
- WLAN optional via Snom USB WLAN dongle2

User interfaces and setup

- **Configuration and setup via menu-driven web user interface (WUI)**
- Password-protected login
- Secure web server/client (HTTPS)
- **Languages**
- Configuration and setup via menu-driven phone user interface (PUI)
- Languages
- **Automatic configuration via provisioning**
- Loading of settings and firmware via HTTP / HTTPS / TFTP
- Supported DHCP provisioning options 66 / 67
- Secure Redirection And Provisioning Service (SRAPS) support
- Remote management via TR-069 / TR-069 Annex G (formerly TR-111)
- Plug & Play (PnP) support
- **Localization**
- Timezone
- Dial tone
- **Diagnostic**
- SIP trace, PCAP trace, Syslog
- **Related features**
- XML browser

Technical Specifications

Directory support and call features

- **12 SIP identities / accounts**
- Up to 12 simultaneous calls
- **Directory support**
- LDAP (server-based directory)
- Local directory with up to 1,000 entries
- **Outgoing call features**
- Speed dialling via function keys
- URL dialling · Local dial plan
- Redial (via dialed calls list)
- Automatic redial on busy
- Caller identification (CLIP)
- Calling Line Identification Restriction (CLIR)
- Call completion (busy/unreachable) 3
- Intercom · Multicast paging
- **Incoming call features**
- Call waiting/swapping
- Call barring/blocking: via deny list, Anonymous calls
- Auto answer
- Call diversion
- Do Not Disturb (DND) mode
- **Connected call features**
- Mute microphone
- Hold
- Music on hold3
- Blind call transfer
- Attended call transfer
- 3-way local conferencing
- Call park / unpark 3
- Client Matter Code (CMC) 3
- **Related features**
- Call history lists of missed, received, dialed, rejected, and deflected calls
- Extension monitoring, call pickup

Technologies and protocols

- **Bluetooth V4.0+EDR**
- **Network technologies**
- OpenVPN, VLAN (IEEE 802.1Q)
- **VoIP related protocols and techniques**
- SIP (RFC 3261), SDP (RFC 3261), RTP (RFC 8866), RTCP (RFC 3550), RTCP-XR, SIP REFER method (RFC 3515), rport (RFC 3581), ENUM, ICE, STUN (RFC 5389)
- **Secure VoIP protocols**
- SIPS (SIP over TLS), SRTP (RFC 3711), SRTCP
- **Network protocols**
- IPv4 / IPv6 (Dual Stack), DHCP, NTP, LDAP, LLDP MED, HTTP, TFTP, L2TP
- **Secure network protocols**
- TLS V1.2, HTTPS, IEEE 802.1X (EAPoL)
- **Remote management protocols**
- TR-069, TR-069 Annex G (formerly TR-111)

Interoperability

- Certified VoIP partner

Technical Specifications

Environmental conditions

- **Operating ambient temperature:**
- 0 °C to 35 °C (32 °F to 95 °F)
- **Nonoperating temperature:**
- - 10 °C to 45 °C (14 °F to 113 °F)
- **Humidity (non-condensing):** 5 % - 95 %

Package contents

- Desk phone unit
- Footstand
- Corded receiver
- 1.5 m (5 ft) Ethernet cable
- Quick Installation Guide (QIG)
- GNU General Public License

Type approval and standards conformance

- Information technology equipment - Safety 60950
- CE marking · WEEE 2012/19/EU

Accessories

- 00004570 | 10 W Power adapter
- 00004342 | A100D | Binaural headset
- 00004341 | A100M | Monaural headset
- 00004388 | A150 | DECT headset
- 00004387 | A170 | DECT headset
- 00004384 | A210 | USB WLAN dongle
- 00004386 | A230 | USB DECT dongle
- 00004343 | ACUSB | Headset adapter
- 00004011 | D7 | Expansion module | black
- 00004382 | D7 | Expansion module | white
- 00004467 | D7C | Expansion module | black
- 00002362 | EHS Advanced 2.0