

# ALE DeskPhones Enterprise range

The ALE DeskPhones Enterprise range is the next-generation of innovative business phones with a sleek industrial design. Built for every work style and workplace they support vertical industry requirements in enterprise environments.

The modular design enabled by the hardware and software customisation capabilities offers a variety of configurations to satisfy all worker generation business communications requirements from touchscreen to physical soft keys, as well as dial-pad.

The ALE DeskPhones Enterprise range is robust, future-proof, energy efficient, and durable. They are based on a state-of-the-art hardware and software platform with rich connectivity options (including Dual Port Gigabit Ethernet, Wi-Fi, Bluetooth®, Dual USB-C, and NFC) to be used in any communications infrastructure, wired or wireless, from on premises to cloud deployment, and are retro-compatible with customer installations.

They can be securely deployed at the office, at home, in flex offices, in huddle rooms and in dedicated verticals environment such as hospitality, health care, finance or education. They offer smart power consumption management based on dynamic power class management, dynamic USB power allocation, presence detection and ambient light sensors.

A control smart pad provides an evolved user experience. A wide variety of options are available for professional end users including; corded handsets, cordless handsets, or no handsets, a wired or wireless headset option, a key expansion module, as well as a physical or virtual alphabetic keyboard.

The ALE DeskPhones Enterprise range is designed for 3D Symphonic HD Audio quality to complement workers' computers and mobile phones with the AudioHub feature. 3D Symphonic HD+ Audio quality is based on a multi-microphone, bass reflex system with passive radiator for clear natural voice, and full-duplex audio for simultaneous conversation.

They provide an all-in-one product line, offering business phone, speaker phone, and conference phone capabilities, thus minimizing the number of devices in the enterprise space.



ALE-500 DeskPhone (SIP mode)  
with ALE-100 keyboard

| Features                               | Benefits                                                                                                                                                                                                                                                           |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALE business communications            | Access all ALE communications platforms' rich and innovative services.                                                                                                                                                                                             |
| Modular design                         | BYOD: Build Your Own DeskPhone with the customisation kit, and options such as the alphabetic keyboard, with or without handset (corded or cordless), wireless and expansion modules.                                                                              |
| Capacitive smart pad                   | Command and control your phone through a central smart pad: Navigate quickly through menus, easily adjust screen brightness and contrast, and easily manage the in/out audio.                                                                                      |
| 3D Symphonic HD audio                  | Enjoy super-wideband audio with handset, or headset and hands-free, for an immersive conversational experience                                                                                                                                                     |
| Portrait touch colour screen           | Benefit from an easy-to-read portrait touchscreen for an intuitive experience.                                                                                                                                                                                     |
| AudioHub                               | Plug a headset or PC into the DeskPhone using the USB connector, pair your smartphone through Bluetooth, and leverage the DeskPhone 3D Symphonic HD audio.                                                                                                         |
| Smart power consumption management     | Save energy using presence detection, ambient light sensor, and dynamic power class management.                                                                                                                                                                    |
| Zero-touch deployment on ALE solutions | Save time when deploying and operating the phones in different configuration, for Alcatel-Lucent OXO Connect, Alcatel-Lucent OXO Connect Evolution, Alcatel-Lucent OmniPCX® Enterprise. VPN Client configuration with EDS server in wired or Wi-Fi configurations. |



|                |                                          | ALE-300                                                      | ALE-400 / ALE-400 BT                          | ALE-500 w/o handset                                         | ALE-500 / ALE-500 BT                                            |
|----------------|------------------------------------------|--------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|
| Key highlights |                                          | 3.5" Colour screen, 2x5 keys, super-wideband, corded handset | 4.3" touch screen, corded or cordless handset | 5.5" touch screen, integrated BT and WLAN, 2x6 virtual keys | 5.5" touch screen, corded or cordless handset, 2x6 virtual keys |
| Screen         | Size                                     | 3.5"                                                         | 4.3"                                          | 5.5" vertical                                               | 5.5" vertical                                                   |
|                | Touch screen                             |                                                              | •                                             | •                                                           | •                                                               |
|                | Colour display                           | •                                                            | •                                             | •                                                           | •                                                               |
| Connectivity   | 2 RJ45 Gigabit ports (LAN/PC)            | •                                                            | •                                             | •                                                           | •                                                               |
|                | RJ12 port for handset                    | •                                                            | •                                             | •                                                           | •                                                               |
|                | 2 USB-C ports                            | •                                                            | •                                             | •                                                           | •                                                               |
|                | NFC                                      | •                                                            | •                                             | •                                                           | •                                                               |
| ALE            | Contextual keys                          | 2x5                                                          | 2x5                                           | 2x5                                                         | 2x5                                                             |
| Communications | Programmable keys                        | 3                                                            | 3                                             | 5                                                           | 5                                                               |
|                | Virtual keys add-on                      |                                                              |                                               | 2x6                                                         | 2x6                                                             |
| Audio          | Super-wideband handset                   | •                                                            | •                                             | •                                                           | •                                                               |
|                | Full-duplex, super-wideband speakerphone | •                                                            | •                                             | •                                                           | •                                                               |
|                | 3D Symphonic Audio <sup>1</sup>          | HD                                                           | HD+                                           | HD+                                                         | HD+                                                             |
|                | Voice Activity Detection (VAD)           | •                                                            | •                                             | •                                                           | •                                                               |
|                | Comfort Noise Generation (CNG)           | •                                                            | •                                             | •                                                           | •                                                               |
|                | Microphones                              | 1                                                            | 3                                             | 3                                                           | 3                                                               |
| Accessories    | ALE-100 Alphabetic keyboard              | o                                                            | o                                             | o                                                           | o                                                               |
|                | ALE-108 WLAN <sup>2</sup> , BT module    | o                                                            | o / •                                         | •                                                           | o / •                                                           |
|                | ALE-110 Wall mounting kit                | o                                                            | o                                             | o                                                           | o                                                               |
|                | ALE-120 keys expansion modules           | o                                                            | o                                             | o                                                           | o                                                               |
|                | ALE-140 Customisation kit <sup>3</sup>   | o                                                            | o                                             | o                                                           | o                                                               |
|                | ALE-160 Cordless handset                 |                                                              | o / •                                         |                                                             | o / •                                                           |
| Power          | Power over Ethernet (PoE)                | Class 1                                                      | Class 2                                       | Class 2                                                     | Class 2                                                         |

<sup>1</sup> High quality speakerphone for HD+

<sup>2</sup> Availability may depend on the software version

<sup>3</sup> DeskPhones sold with Neptune colour by default

• = included  
o = optional

## Datasheet

ALE DeskPhones Enterprise range

## Technical specifications

### Physical characteristics

- ALE-300 with handset and cable:
  - Height: 219 mm
  - Width: 228 mm
  - Depth: 162 mm
  - Weight: 1477 gm
- ALE-400 with handset and cable:
  - Height: 219 mm
  - Width: 228 mm
  - Depth: 162 mm
  - Weight: 1528 gm
- ALE-500 with handset and cable:
  - Height: 219 mm
  - Width: 228 mm
  - Depth: 162 mm
  - Weight: 1525.40 gm
- ALE-500 without handset:
  - Height: 214 mm
  - Width: 163 mm
  - Depth: 156 mm
  - Weight: 1056 gm
- Colour: Neptune blue
- Continuous adjustable foot stand ranging from 25° to 60°
- Wall mountable

### Display

- ALE-300: 3.5 inch colour LCD screen: 240 x 320 pixels
- ALE-400: 4.3 inch colour LCD touch screen: 480 x 272 pixels
- ALE-500: 5.5 inch colour LCD touch screen 720 x 1280 pixels

### Keys

- Control smart pad
- ALE-300: 2x5 contextual keys with LED
- Function keys:
  - On/off hook
  - Dial-pad
  - Mute with LED
  - Volume keys +/-
  - Hands-free with LED
  - 2 personal keys/LED
  - Redial
  - Info and message with LED
- Programmable keys:
  - ALE-300, ALE-400: 3 physical keys
  - ALE-500: 5 physical keys
  - Up to 72 soft keys (OmniPCX Enterprise)<sup>1</sup>
  - Up to 120 soft keys (OXO Connect/ Evolution or OmniPCX Office)<sup>1</sup>
- Magnetic alphabetic USB-C keyboard

### Connectivity

- Dual RJ45 Gigabit Ethernet 10/100/1000 Network Interface for LAN and PC connection
- RJ12 port for corded handset
- Slot for ALE-108 Wireless Dual-Band WLAN (a,b, g, n) - Bluetooth 5.0 Module
- 2 x USB-C ports
- ALE-300, ALE-400, ALE-500: NFC for easy pairing. Bluetooth easy pairing with ALE-108

### Power

- Power over Ethernet (IEEE 802.3af)
- Power consumption Idle – Active (w/o USB):
  - ALE-300 corded handset: 1.4 W - 1.8 W
  - ALE-400 corded and cordless handset: 1.5 W - 2 W
  - ALE-500 corded and cordless handset: 1.7 W - 2.1 W
  - ALE-500 without handset: 1.7 W - 2.1 W
- Optional USB-C power supply 5V/3A
- ENERGY STAR® certified

### Audio characteristics

- Super-wideband: handset, headset and hands-free
- 3D Symphonic HD (hands-free)
  - Audio HD (ALE-300)
  - Audio HD+ (ALE-400/ALE-500)
- Hearing Aid Compatible (HAC)
- Full-duplex speakerphone
- Acoustic echo cancellation
- OPUS Codec
- Wideband G722
- G711 (A-law and Mu-law)
- G729 AB
- Voice Activity Detection (VAD)
- Comfort Noise Generation (CNG)

### Protocols and advanced communications

- IP NOE or SIP
- OmniPCX® Enterprise
- OXO Connect, OXO Connect Evolution

### Open application platform

- XML application support (NOE-IP)
- Corporate directory access using LDAP (SIP)

### Network and provisioning

- DHCP and static IP
  - Manual or dynamic host configuration protocol (DHCP) network setup (RFC2131)
- Cloud-based enrollment using ALE EDS
- QoS support
  - IEEE 802.1p/Q tagging (VLAN), Layer 3 TOS, and DSCP
  - QoS tickets
  - LLDP-MED
  - IEEE 802.1 AB/LLDP-MED client (IPv4/IPv6, automatic VLAN acquisition, PoE management, inventory information)
- Energy Efficient Ethernet 802.3 az support

### Security

- Authentication: Basic or digest, 802.1x
  - 802.1x Message Digest 5 (MD5)/TLS: For authentication, customer certificates management (with centralized deployment)
  - Denial of service (DoS) attack protection: Flooding
  - ARP spoofing protection
- Transport: TLS 1.2 (RFC5246) and SRTP (RFC3711)
  - Encryption and authentication of the signalling traffic
  - Encryption of the media traffic.
  - SCEP Support
- Shipped with (X509v3 ) certificate installed
  - Certificates for 802.1x EAP-TLS (either Alcatel-Lucent Enterprise or customer certificates) for Native Encryption (NOE-DTLS support).
  - IP Sec VPN support

### Languages

- Multi-language support (menu) : Arabic, Catalan, Chinese (simplified), Chinese (traditional), Croatian, Czech, Danish, Dutch, English, English Australia, English US/Canada, Estonian, Finnish, Flemish, French, French Canadian, French Swiss, German, German Austria, German Swiss, Greek, Hebrew, Hungarian, Italian, Italian Swiss, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Portuguese Brazil, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Taiwanese, Thai, Turkish, Valencian

<sup>1</sup> Availability may depend on the communication server version

## Regulatory Standards

- Safety
  - IEC/EN 62368-1
  - UL/CSA 62368-1
- RF (with ALE-108)
  - EN 300 328
  - FCC 47 CFR Part 15 C
  - RSS-247
  - AS/NZS 4268
  - For WLAN: EN 301 893, EN 300 440, FCC 47 CFR Part 15 E
- EMC
  - EN 55032 Class B
  - 47 CFR Part 15 B Class B
  - ICES-003 Class B
  - EN 55035
  - EN 61000-6-1 (Immunity for residential and commercial environments)
  - EN 61000-6-2 (Immunity for industrial environments)
  - EN 61000-6-3 (Emission for residential and commercial environments)
  - EN 61000-6-4 ((Emission for industrial environments)
  - IEC 60945 (Maritime)
  - IEC 60259 (IPX2)
  - IEC 62236-4 (Railway)
  - EN 301 489-1
  - EN 301 489-17
  - EN 61000-3-2
  - EN 61000-3-3
  - RF Exposure (with ALE-108): EN 62311, RSS-102, FCC KDB series

- Telecom
  - TIA/EIA 810-B
  - TIA 920.130-A-1
  - AS/CA S004
- Audio hearing aid
  - FCC47 CFR Part 68
  - Industry Canada CS-03 Part V
  - Australia AS/ACIF S040
- Eco-design
  - 2009/125/EC
  - ROHS 2011/65/EU
  - WEEE 2012/19/EU
  - REACH 1907/2006

## Environmental conditions

- Temperature: Corded Handset or without Handset: -5°C to +55°C
- Cordless Handset: +10°C to +55°C
- Relative humidity: 5% to 85%
- Storage temperature: -25°C/+70°C
- IP Class: IP22

## Serviceability

- Syslog mode
- Port mirroring

## Product ships with

- ALE-300/ALE-400: DeskPhone with handset
- ALE-500: DeskPhone with or without handset
- Safety sheet

## Ordering Information

- 3ML27310AA ALE-300 Corded Handset
- 3ML27410AA ALE-400 Corded Handset
- 3ML27420AA ALE-400 Cordless Handset
- 3ML27500AA ALE-500 without Handset
- 3ML27510AA ALE-500 Corded Handset
- 3ML27520AA ALE-500 Cordless Handset

## Accessories:

- 3ML37100FR ALE-100 Keyboard AZERTY
- 3ML37100DW ALE-100 Keyboard QWERTY
- 33ML37100DE ALE-100 Keyboard QWERTZ
- 3ML27108AA ALE-108 Wireless module
- 3ML37120AB ALE-120 Key expansion module
- 3ML27140Ax ALE-140 Customisation kit
- 3ML37190xx 5V/3A USB-C Power Supply
- 3ML37101AA AudioHub USB cable
- 3ML27110AA Wall mounting kit
- 3AK21492AB 3m RJ45/RJ45 cable (x10)
- Wired headsets:
  - 3MK08014AB AH 22 M II premium headset binaural 3.5mm Jack/USB-A/C
- Wireless headsets:
  - 3MK37008AA AH80 BT headset with USB-A dongle

## Configuration examples



ALE-300 DeskPhone  
with ALE-120 and Factory  
grey customisation kit  
3ML27140AB (ALE-300)  
3ML37145AB (ALE-120)



ALE-400 DeskPhone  
SIP mode with  
Azur customisation kit  
3ML27140AC



ALE-500 DeskPhone  
NOE mode and Ruby red  
customisation kit  
3ML27140AD



ALE-500 DeskPhone  
SIP mode without handset  
Neptune Blue and  
AH80 BT headset

