

Unify OpenScape WLAN Phone WL4

Take advantage of WLAN networks with powerful Voice-over-Wireless LAN (VoWLAN) endpoint solutions.

As enterprises benefit from the cost savings and simplified management of converged voice and data networks, consider the power of including wireless device communication on the same network. OpenScape WLAN Phone WL4 devices use your WLAN infrastructure to empower employees to freely move about the workplace ultimately improving productivity.



OpenScape WLAN Phone WL4

Our solution

OpenScape WLAN Phone WL4 handsets provide an enterprise-grade wireless voice solution that unites our experiences from WLAN and DECT for the best priced mobile device of its class.

As one of the best-in-class VoWLAN solutions, OpenScape WLAN Phone WL4 delivers a high voice quality, industry-standard security features and a superb user interface. Above all, it operates in IEEE 802.11b/g/n/ac environments, so all of your connected devices receive the maximum data transfer rate, for optimal performance.

The IEEE 802.11 standard allows the new VoWLAN handsets to be deployed with 802.11-compatible access points in many network environments.

The SIP-compliant OpenScape WLAN Phone WL4 handsets can be operated with the SIP interfaces of the below mentioned platforms, which also let you enjoy the powerful VoWLAN telephone features.

Beautifully designed and fully-featured, the OpenScape WLAN Phone WL4 comes equipped with a colored, backlit graphical display for easy to access phone features under sub-optimal conditions. Plus optional features such as advanced alerting and messaging make the range of OpenScape WLAN Phone WL4 devices ideal for healthcare, retail, logistics or manufacturing industries.

Our telephones

Our WLAN endpoint family consists of the OpenScape WLAN Phone WL4 and OpenScape WLAN Phone WL4 Plus and come as standard with the following features:

- *Compatible to the 802.11 a/b/g/n/ac WLAN standards*
- *Usage of the Session Initiation Protocol (SIP) over WLAN to maintain voice communication*
- *Intuitive user interface on a large color display*
- *Centralized management*

Advanced optional features for the OpenScape WLAN Phone WL4 Plus include:

- *Interactive messaging to receive and send messages*
- *Advanced alarming & positioning*

OpenScape WLAN Phone WL4

OpenScape WLAN Phone WL4 is our entry-level VoWLAN telephony device. To expand its capabilities, a message license can be applied to benefit from the advanced messaging functionality.

OpenScape WLAN Phone WL4 Plus

At the top of the VoWLAN product offering stands the OpenScape WLAN Phone WL4 Plus delivering VoWLAN telephony, but also messaging and personal advanced alarm functionality.

Characteristics

Platforms

OpenScope WLAN Phone WL4 telephones were tested on the following platforms:

- *OpenScope 4000 (from V8)*
- *OpenScope Business (from V3)*
- *OpenScope Voice (from V9)*

OpenScope WLAN Phone WL4 handsets communicate to all of these platforms via SIP.

Environment

OpenScope WLAN Phone WL4 telephones are designed for enterprises that deploy WLAN and IP infrastructure and OpenScope communication systems or other SIP-based communication systems.

Physical

- *Dimensions (l × w × d):*
137 × 52 × 21 mm
- *Weight: 135 g (excl. clip) (4.8 oz)*
- *Color: Black*
- *Display (w × h):*
31 × 41 mm (2 in)
- *Battery type: Li-polymer, 3.7 V*
920 mAh

Connectors

- *Multi-purpose connector for battery charging, software download and configuration*
- *Headset connector:*
3.5 mm standard jack

User interface

- *Display: TFT display with multiple colors with high resolution. 240 × 320 pixel LCD with white LED backlighting*
- *Indication of call states, voice mails, messages etc. in the display.*
- *Silent alarm (vibration)*
- *Buttons/keypad:*
*12 dial keys (3x4): 0 – 9, # and *,*
3 soft keys for dynamic feature access,
off-hook key,
on-hook and power on/off on the same key,
five-way navigation key,
sound-off side key,
volume up/down side key,
multifunction button at the top,
10 hot keys (0, 2 – 9) for fast feature access

Audio

- *Ring signal:*
Adjustable in 8 steps
- *Duplex loudspeaker function*
- *Hearing aid compatible (HAC)*

Languages

Multi-language user interface in 20 languages, those are: Arabic, Chinese (simplified), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Norwegian, Polish, Portuguese (Brazilian), Russian, Slovak, Spanish, Swedish and Turkish.

Phonebook options

- *Local phonebook:*
maximum 250 entries,
selectable ring tones per contact
- *Company phonebook:*
maximum 1,000 entries
- *Central phonebook:*
access to LDAP (system-dependent)

Graphical Call Handling

- *Indication: 14 ring signals, illuminated display and vibrator*
- *Call list storage capacity: 25 calls (received, dialed and missed) with time stamp*
- *Voice codecs: Opus Wideband, G.711 A-law (EU), G.711 μ-law (US), G.729, G.729A, G.729B, G.722*
- *SIP registration to a SIP proxy/registrar*

Messaging

This feature is available for OpenScope WLAN Phone WL4 including a messaging license and comes standard with the OpenScope WLAN Phone WL4 Plus.

- *Maximum message length from OpenScope WLAN Phone WL4: 160 characters*
- *Storage capacity:*
30 messages received/sent

Alarm

This feature is available for OpenScope WLAN Phone WL4 Plus.

- *Alarm types: Push button alarms*
- *Man-down and No-movement alarm*
- *Acoustic location signal at alarm*
- *Automatic call after alarm*

Radio specification

- *Receiver sensitivity (typical values):*
 - 87 dBm (802.11a, 6 Mbps),
 - 93 dBm (802.11b, 1 Mbps)
 - 87 dBm (802.11g, 6 Mbps),
 - 86 dBm (802.11n, MCS0)
- *Frequency band:*
 - EU:**
 - b/g:* 2.4 to 2.4835 GHz (ch. 1 to 13)
 - a:* 5.15 to 5.35 GHz (ch. 36 to 64), 5.47 to 5.725 GHz (ch. 100 to 140)
 - USA:**
 - b/g:* 2.4 to 2.4735 GHz (ch. 1 to 11)
 - a:* 5.15 to 5.35 GHz (ch. 36 to 64), 5.47 to 5.85 GHz (ch. 100 to 165)
 - Canada:**
 - b/g:* 2.4 to 2.4735 GHz (ch. 1 to 11)
 - a:* 5.15 to 5.35 GHz (ch. 36 to 64), 5.47 to 5.6 GHz (ch. 100 to 116), 5.65 to 5.85 GHz (ch. 132 to 165)
- *Maximum output power:*
100 mW / 20 dBm
- *Modulation speed:*
 - b:* 1, 2, 5.5, 11 Mbps
 - a, g:* 6, 9, 12, 18, 24, 36, 48, 54 Mbps
 - n:* MCS-0–MCS-7
 - ac:* MCS-0–MCS-9
- *Bluetooth radio spectrum:*
Output power:
ISM 2.4000-2.4835 GHz
Maximum 3 dBm (Class 1)

Protocols

- TCP/IP
- IP addressing: DHCP, fixed
- Configurable DSCP
- DNS support (primary/secondary)
- SIP/RTP
- UDP
- SRTP/TLS
- SNMP

WLAN

- *Number of networks:* 4 systems, auto selection and manual selection
- *Quality of Service (QoS):* WMM, TSPEC-based CAC
- *Supported networks:* 802.11 a/b/g/n/ac (MCS0-7)

WLAN security

- *Security standard:* 802.11i, 802.11w
- *Encryption methods:* AES-CCMP
- *Authentication methods:*
 - Open
 - WPA-PSK,
 - WPA2-PSK,
 - PEAP-MSCHAPv2,
 - EAP-TLS

WLAN roaming enhancement

- 802.11r, 802.11k
- Opportunistic key caching
- PMKSA caching
- CCKM

Environment

- *Operating temperature:*
-5 °C to +45 °C (+23 °F to 113 °F)
- *Storage temperature:*
-20 °C to +60 °C (-4 °F to 140 °F)
- *Charging temperature:*
0 °C to +50 °C (+32 °F to +122 °F)

Enclosure protection

IP44, IEC EN 60529

Additional features

- Time and date indication
- Customized GUI
- Profiles to quick change of WLAN settings
- Easy replaceable battery
- Name display in call list
- Clear lists in charger
- Manual and automatic keypad lock
- Integrated site survey tool

Configuration options

- Local telephone configuration and software update via Desktop Programmer and tool running on a PC, connection between PC and Desktop Programmer via USB
- Over the air configuration via Wireless Service Gateway (WSG)

Accessories

- Carrying case
- Swivel-type clip
- Security cord
- Desktop charger, AC adapter (by geographical region)
- Wide range of headsets available
- Desktop Programmer (via USB) with Portable Device Manager
- Charging rack for phones and batteries

Wireless Service Gateway (WSG)

The WSG is used as an all-in-one solution for centralized management, messaging and alarm handling. It includes a central phonebook which can be accessed from the OpenScape WLAN Phone WL4 telephones. In addition, the WSG provides interfaces to LDAP and to external messaging/alarming applications which handle message and alarm processes. One of these applications is the OpenScape Alarm Response system (OScAR).

The WSG web-based application runs on a Linux-based application platform. It is intended for connections via IP only.

Characteristics

- *1 LAN port*
- *1 mini-USB port for easy local management*
- *Designed to be mounted on a wall (horizontally or vertically) and to fit in a 19" rack.*
- *Tri-color LEDs for status and power indications*
- *Buttons for switching the operation mode and for controlled restart of the module*

Technical data

Physical

- *Dimensions (h × w × d):
44 × 220 × 199 mm
(1.73" × 8.66" × 7.83")*
- *Weight: 1,520 g*
- *Material: Sheet metal/plastic*
- *Color: Grey/white*

Functional

Power supply voltage:
100 - 240 V AC ±20 %

Environment

- *Operating temperature:
0 °C to +40 °C
(32 °F to 104 °F)*
- *Storage temperature:
-25 °C to +55 °C
(-13 °F to 130 °F)*
- *Relative humidity:
30 to 85% (non condensing)*
- *Enclosure protection: IP30*

Protocols

- *TCP/IP*
- *IP addressing: DHCP, fixed*
- *Configurable DSCP*
- *LDAP*
- *OAP*