Alcatel-Lucent 8378 DECT IP-xBS

The Alcatel-Lucent 8378 DECT IP-xBS provides a robust infrastructure for Digital Enhanced Cordless Telecommunications (DECT) in buildings and outdoors, to connect mobile workers everywhere. The unique radio tuning capabilities and on-air synchronization enable network coverage in most difficult areas to ensure excellent voice quality everywhere.



8378 DECT IP-xBS indoor internal antennas

The IP-xBS base stations pair with Alcatel-Lucent DECT handsets to deliver expert communication features (such as, dial-by-name and multi-line management) from Alcatel-Lucent communication servers.

The 8378 IP-xBS powered solution offers cost-effective operations for all sizes of enterprise businesses. Excellent voice quality meets operational simplicity in small branches, SMB, and large multi-site companies with networked communication servers. The base stations leverage the IP network for voice; do not require any IP network customization; and are centrally managed by the communication servers.

8378 DECT IP-xBS handover and roaming capabilities on the Alcatel-Lucent OmniPCX Enterprise Communication Server (OXE) extend the mobile coverage of TDM DECT networks, based on Alcatel-Lucent 4070 and 8379 DECT base stations. Investments in TDM DECT are preserved with IP-xBS base stations. They deliver quick return on investment, and seamless mobility for remote buildings, branch offices and refurbished floors.

Features	Benefits
Automated provisioning and over-the-air synchronization of base stations	Zero-touch deployment suitable for small businesses and large buildings
Support of AGAP and GAP protocols	Expert communications with AGAP including twinset with desktop phone, multi-line management, dial-by-name
Suitable for indoor and outdoor environments	Excellent voice quality everywhere
Built-in centralized management over IP with Alcatel-Lucent communication servers	Cost-effective operations with 100% IP, or virtualized communication servers, without requiring IP multicast and additional servers or gateways
Radio tuning capabilities per base station and on-air synchronization	DECT users can be reached in most challenging places such as staircases, U-shaped buildings, manufacturing, warehouses, and boats, among others
Up to 2032 base stations per communication server	Scalability to address very large campuses and networked buildings
Handover and roaming with Alcatel-Lucent TDM DECT base stations	TDM investments are preserved and IP base stations offer fast ROI for all-IP buildings and branch offices

Technical specifications

Radio specifications

- DECT/GAP
- Frequency band
  - ¬ Europe: 1.88 GHz – 1.90 GHz
  - ¬ US: 1.92 GHz to 1.93 GHz
  - ¬ South America: 1.91 GHz to 1.93 GHz Except Brazil: 1910 to 1920 MHz
  - ¬ Asia: 1.90 GHz to 1.906 GHz

Functionality

Channels can be disabled by communication server to adapt to local regulations

- Channel bandwidth: 1.728 MHz
- Transmission carriers: 10
- Maximum number of simultaneous active call: 11
- Over the air synchronization; requires one channel
- Mix of IP and TDM DECT Infrastructure supported
- RF power 250 mW, limited to 100 mW for US (DECT 6.0)
- Sensitivity: Typical -90 dBm measured at antenna connection at BER=0.001
- Radio coverage from 50 m to 300 m (approximately 55 yd to 328 yd) depending on location and environment
- Switched antenna diversity
- Integrated omni-directional antenna 2dBi gain (maximum)
- SMA connectors for connecting external antennas

DECT protocol specifications

- ETSI GAP compliant
- Alcatel-Lucent AGAP protocol
- DECT Security, DECT encryption
- Roaming and seamless handover
- Support identity, authentication and encryption
- Audio CODEC G726
- OmniPCX Enterprise configuration: up to 2032 base per node
- OXO Connect, OXO Connect Evolution: up to 80 access points

IP specifications

- IPV4, IPV6 hardware ready
- DHCP/TFTP, DHCP option 60, 77, 12, Next-server field, 43, option 43 sub option 58 VLAN id
- Static IP address supported
- QoS: IEEE 802.1 P/Q
- LLDP MED
- Audio CODEC: G711 (A,µ), G729AB
- Framing: 20 ms
- Ready for manufacturing and customer certificates support

Network interface

- IP interface 10/100Base-T, IEEE802.3
- IPV4
- RJ45 connector
- CAT 5 or CAT 6 UTP cabling

Power feeding

- Remote power feeding on 802.3af IP link
- PoE class 2 (6.49 W maximum)
- Same PoE injector as the Alcatel-Lucent Premium DeskPhone range

Operating temperature

- Indoor: 41°F to 113°F (+5°C to 45°C)
- Outdoor: -4°F to 131°F (-20°C to +55°C)

Dimensions (Wall and ceiling mountable)

- Indoor integrated antennas
  - ¬ Height: 5.67 in. (144 mm)
  - ¬ Width: 5.51 in. (140 mm)
  - ¬ Depth: 1.38 in. (35 mm)
  - ¬ Weight: 10.40 oz. (295 g)
- Indoor for external antennas
  - ¬ Height: 5.67 in. (144 mm)
  - ¬ Width: 5.51 in. (140 mm)
  - ¬ Depth: 1.38 in. (35 mm)
  - ¬ Weight: 11.04 oz. (313 g)
- Outdoor
  - ¬ Height: 14.4 in. (365 mm)
  - ¬ Width: 8.3 in. (210 mm)
  - ¬ Depth: 2.6 in. (65 mm)
  - ¬ Weight: 38.8 oz (1.10 kg)

Deployment

- IP auto discovery
- Automatic air synchronization
- Radio fine tuning for harsh environment

Serviceability

- LED status indication
- Firmware downloadable through communication server
- Communication server troubleshooting tool, air synchronization tree, statistics

Regulation

- EU directives
  - ¬ Radio Equipment Directive; 2014/53/EU
  - ¬ ROHS 2011/65/EU
  - ¬ Limitation of exposure of general public to electromagnetic fields 1999/519/EC WEEE 2012/19/EU
- Safety
  - ¬ IEC 62368-1
  - ¬ EN 62368-1
  - ¬ UL 62368-1 2nd edition
  - ¬ CAN/CSA-C22.2 No.62368-1-14
- EU regulations
  - ¬ 2023/1670 (Ecodesign)
- EMC
  - ¬ EN 301 489-01
  - ¬ EN 301 489-06
  - ¬ Aus: EN 55032:2012 + AC:2013
- Radio
  - ¬ EU: EN 301 406
  - ¬ USA: FCC CFR47 Part 15D
  - ¬ CAN: RSS-213 Issue 3

SAR

- EN 50385
- FCC OET Bulletin 65
- RSS-102
- AS/NZS 2772.2:2011: Assessment methods

DECT

- EU:EN 301 406
- EN 300 175

Environmental

- ETS
  - ¬ Operation (indoor): ETSI EN 300 019-1-3-class 3.1
  - ¬ Operation (outdoor): ETSI EN 300 019-1-4-class 4.2H with -20°C for low temperature and +55°C for high temperature
  - ¬ Storage: ETSI EN 300 019-1-1-class 1.2
  - ¬ Transport: ETSI EN 300-019-1-2-class 2.3
- IP Class
  - ¬ IP Class (IEC 60529)
  - ¬ Indoor base station: IP30
  - ¬ Outdoor base station: IP55

Models

- 3BN67365AA 8378 DECT IP-xBS integrated antennas
- 3BN67366AA 8378 DECT IP-xBS for external antennas
- 3BN67367AA 8378 DECT IP-xBS OUTDOOR with external antennas

Accessories

- 3BN67185AA 8 dBi Gain antenna
- 3BN67395AA DECT omnidirectional 7DBI antenna
- 3BD52205AA 8dB right circular antenna
- 3BD52206AA 8dB left circular antenna
- 3MG27035xx PoE injector

© 2026 ALE International, ALE USA Inc. All rights reserved in all countries. The Alcatel-Lucent name and logo are trademarks of Nokia used under license by ALE. To view a list of proprietary ALE trademarks, visit: www.al-enterprise.com/en/legal/trademarks-copyright. Some visuals in this document may have been generated using AI and are for illustrative purposes only. DID00295808EN (July 2026)

Alcatel·Lucent