

Business Mobility SIP DECT

Wireless telephony for SIP-based systems



Key features

- Adds DECT wireless to the all SIP-based telephony systems and communication platforms
- Supports standard DECT (GAP) compatible handsets
- Supports up to 11 simultaneous calls per access point
- Secure air interface
- Crystal clear speech and seamless handover
- Supports short messaging
- Connects directly to Ethernet
- External power or Power over Ethernet (PoE)
- IP peer-to-peer communication
- Simple plug-and-play installation
- Compact unit (A5 size)
- Downloadable software
- LED status indicator



In today's business environment you want to offer your employees a flexible way of working, while increasing customer service. You want to extend the reach of your voice network but also save on branch office costs. You want to optimise the use of your converged network and offer feature transparency between the wired and wireless world. You want to extend VoIP to the wireless world without any compromise in voice quality, availability and security. With Business Mobility SIP DECT you can do all of that, and more!

- Cost savings – Business Mobility SIP DECT drastically reduces your monthly cellular costs by offering a mobile, flexible, easy to use wireless voice solution in the office environment.
- Business efficiency – SIP DECT offers wireless VoIP connectivity to users in a single office environment, campus environment or even metropolitan environment, dramatically increasing reachability and productivity of employees.
- Increased performance – SIP DECT offers more functionality on one single platform; overall efficiency and productivity will increase.
- No compromise – SIP DECT offers all the advantages of IP telephony with the voice quality, security, availability and feature transparency of traditional DECT.

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Open platform

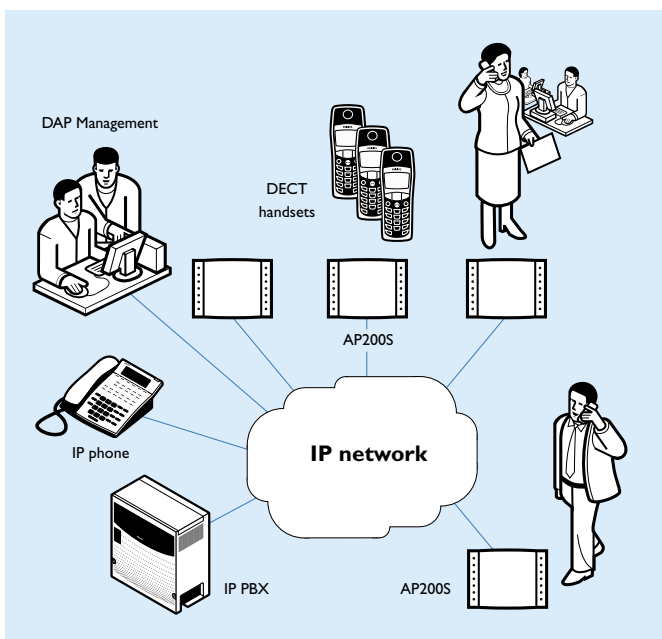
Business Mobility SIP DECT makes wireless telephony possible in every IP enabled network that has a SIP interface on the PABX. For companies switching over to a complete IP network, SIP DECT is a unique solution that combines the benefits of IP telephony with the superior quality and facilities of the well-established DECT technology. This SIP-based wireless system retains the service level to which customers are accustomed, providing perfect voice quality, seamless handover between cells and a secure air interface. With SIP DECT, a single converged network can be used to provide both fixed and wireless telephony, thus reducing dedicated cabling requirements to the bare minimum.

The available SIP interface allows DECT mobility to be offered to a host PABX with a SIP interface. The capabilities/features of IP DECT in combination with the SIP-enabled PBX depends on the level of cooperation between the two.

Configuration

The diagram below shows a typical configuration in which AP200S DECT Access Points (DAP) provide wireless telephony. The DECT system is integrated with the (Soft-) PABX via the IP network, which can be either a dedicated network or the company's converged voice/data network.

The configuration can also include other applications, such as messaging, voicemail, web-based telephony and speech-enabled directory services.



Interoperability testing

Interoperability tested on following platforms*	
NEC Philips Unified Solutions	IPC100/500, 2000 IPS, iS3000, SV7000
NEC	Aspire, XNI 20, IPK-II, NEAX 2400 IPX
3Com	VCX
Allied Telesis	VioCall
Asterisk	Asterisk
Brekeke	OnDo PBX
Cisco	Call Manager
Dafür	IP PABX NATJA
Interactive Intelligence	Vonexus
IPTel	SIP Express Router
Mitel	3300
Nortel	Meridian
Televantage	Televantage
Total XS	Total XS Hosted platform

*) NEC Philips Unified Solutions has tested the SIP DECT solution on these platforms under laboratory conditions. No rights can be derived from this statement.

Our product offer

AP200S SIP DECT access point

The SIP DECT access point (AP200S) is a compact, easy to install, plug-and-play module that adds wireless telephony to SIP-enabled IP telephone systems. The AP200S has 12 channels with the capacity for up to 11 simultaneous calls per DECT access point (one channel is reserved for control signalling between DECT access points). Up to 255 DECT access points can be connected into one DECT system, enabling you to configure the precise coverage and capacity requirements of your DECT installation.

The AP200S has a 10/100 Mbit Ethernet interface, which supports PoE. It can be powered externally or via the LAN using a standard based PoE switch or PoE power injector.

DAP Manager

The DAP Manager runs on a standard computer and is only needed for support control and management functions such as:

- Managing the AP200S access points (DAP) in a network
- Managing installation, maintenance and subscription services via web-based user access
- Enabling the messaging interface, when combined with NEC Philips Unified Solutions' Messenger@Net

The DAP Manager is not required for normal, day-to-day operations (i.e. wireless communications). The DAP Manager can run alongside other applications and does not require a dedicated server.

DECT handsets

C124

Entry level handset offering standard feature support for a competitive price operation (see C124 datasheet).

C244

Standard business handset with graphical backlit display, caller list and redial list, internal directory, hands-free operation (see C244 datasheet).

C944

Advanced Business handset offering a rich set of features, including large backlit graphical display and illuminated keypad, headset support, text-messaging operation (see C944 datasheet).

I600

Industrial handset offering similar features as the C944, but IP54 compliant, man-down and memory card support operation (see I600 datasheet).



AP200S main features

- Supports DECT GAP compatible handsets
- 10/100 Mbits Ethernet interface
- Full non-blind slot radio
- Supports up to 11 simultaneous calls per AP200S
- Secure DECT encryption
- Roaming and seamless handover
- Support of (LRMS) messaging (max. 160 characters)
- CLIP and Name display
- Enquiry
- DTMF and call progress tones
- Message waiting indication
- Downloadable software
- Plug-and-play installation

Peer-to-peer media stream

The Business Mobility SIP DECT peer-to-peer media stream support ensures that voice traffic flows directly between terminals on the IP network, instead of to and from the PBX, as with traditional telephony. This reduces the load on the IP network and improves the quality of service.

Capacity

- Nr. of simultaneous calls per AP200S: 11
- Max. nr. of AP200S Access Points per DECT system: 255
- Max. 25 DECT handsets per AP200S

Expert Services

Business Mobility SIP DECT is fully supported by our extensive Expert Services portfolio, which provides the insight and support needed to get the most out of equipment and applications. Services offered comprise advice, design, customisation, integration, training, maintenance, continuous optimisation and Business Partner services.

Technical data

Network interface

- 10/100BASE-T IEEE802.3
- Connector: 8-pin RJ45
- Cable: Cat 5 UTP or better
- IP version 4, DHCP, TFTP
- QoS: IEEE 801.1Q, 802.1P and DiffServ
- Audio algorithm: G.711
- DTMF generation: H.245
- Multicast: IEEE 802

Air interface

- Audio algorithm: G.726 ADPCM
- Full non-blind slot DECT RF part, according to EN301406
- Frequency band: 1880 - 1900 MHz
- 10 carrier frequencies
- RF output: 20 to 24 dBm at antenna connection
- Sensitivity: typical -90 dBm measured at antenna connection at BER=0.001
- Dual omni-directional internal antennas
- Typical range: indoor 20-50 m, outdoor 300 m

Power supply

- Power over Ethernet (PoE): 36-60 V over spare wire pairs and phantom feed in accordance with IEEE802.3af (Class 0)
- Optional: external AC/AC power supply 230 V +/- 10% with Euro or UK plug
- Optional: external 1 port PoE
- Power consumption: ≤ 6 W

Maintenance

- LED status indication
- Web-based management tool
- Downloadable software

Physical characteristics

- Size: 235 x 45 x 172 mm (wxdxh)
- Weight: 540 g (incl. packaging)
- Housing: ABS/polycarbonate, light grey (colour code 70109)
- Classification: IP40
- Optional: outdoor housing class IP66
- Package contains: AP200S, mounting material

Reliability

- MTBF ≤ 4600 FIT (Failure In Time)
- Technical lifetime ≥ 7 years

Environmental conditions

- ETS 300 019-1-3, temperature range:
 - Storage class 1.2 (-25° C to +60° C)
 - Transport class 2.3 (-40° C to +70° C)
 - Operation class 3.1 (0° C to +60° C)
- Relative humidity < 90% (non condensing)
- The equipment is in compliance with the requirements of EU directive 2002/95/EC (RoHS) and 2002/96/EC (WEEE)

Compliance

- Safety
 - EN60950-1: 2001
 - EN50385
- Electro Magnetic Compatibility (EMC)
 - EN301 489-1 and 6
 - EN61000-3-2/3 (AC supply)
- DECT
 - EN301 406-V1.4.1: 2001-03
 - EN300 757 (Service Class 2)

DAP manager PC platform

- Windows 2000 Server or Professional, Service pack 4
- Windows 2003 Server
- Windows XP Professional SP2
- CPU: minimum 2.4 GHz
- RAM: minimum 256 Mb

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