



NEC UNIVERGE IP DECT

Wireless telephony for IP networks. DECT Access Point

Key features

- Supports standard DECT compatible handsets
- Secure air interface
- Clear speech and seamless handover
- Flexible assignment of channels, without replacing hardware
- Support of G.729A compression
- Supports short messaging
- Connects directly to Ethernet
- Power over Ethernet
- IP peer-to-peer communication
- Simple plug-and-play installation
- Compact unit (A5 size)
- Support of external antennas
- Downloadable software
- LED status indicator
- Supported on UNIVERGE IP-Platforms IPS2000, IPX2400, SV7000



The NEC AP200 IP-DECT Access Point is a radio base station that provides wireless telephony to enterprise networks. It connects directly to the LAN, making dedicated cabling between radio base stations and the PBX no longer necessary. Instead, the AP200 makes use of a single converged voice and data network.

Providing wireless telephony within a multi-site business or campus environment involves simply installing DECT Access Points at the remote locations. No additional remote equipment is needed. The AP200 supports compression using the G.729A Codec allowing it to be used in branch office locations with limited bandwidth.

The AP200 combines the benefits of wireless telephony with those of the converged network, while retaining the quality, security and reliability of the DECT standard. Connection to either of the powerful NEC 2000 IPS, 2400 IPX or SV7000 range of IP telephony platforms makes system features accessible through a wide range of DECT-compatible handsets.

NEC

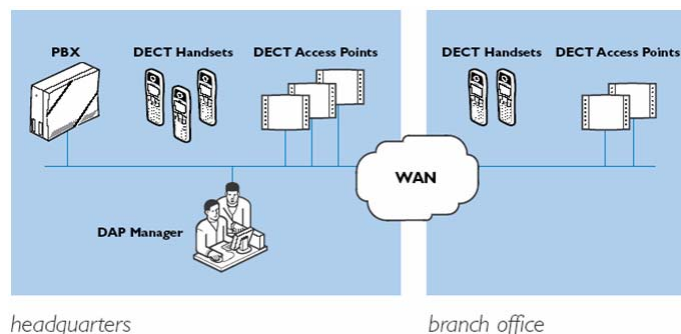
NEC Australia Pty Ltd

The AP200 is a compact and easily installed plug-and-play module, the software for which can be downloaded from a single maintenance point. The number of channels per AP200 can easily be adjusted to capacity requirements. The AP200 uses Power Over Ethernet (IEEE 802.3af) allowing for flexible deployment.

The AP200 range of products comprises: the AP200 base station, the AP200E base station with connection for directional external antenna. A weatherproof outdoor enclosure can be used to provide outdoor coverage.

Configuration

The diagram shows a typical configuration, in which DECT Access Points (DAPs) provide wireless telephony to headquarters and branch office locations. The DAP Manager integrates all DAPs with the PBX. The configuration may also include other applications, such as short messaging, voice mail, unified messaging, web-based telephony and speech-enabled directory services.



DAP manager

The DAP Manager software runs on a standard computer and supports control and management functions such as:

- Wide area roaming
- Managing all DAPs in a network
- Managing installation, maintenance and subscription services via web-based user access
- Enabling handset to handset messaging.

Main features

- Supports DECT GAP compatible handsets
- 10/100 Mbits Ethernet interface
- Full non-blind slot radio
- Secure DECT encryption
- Support of G.729A for compression
- Roaming and seamless handovers
- LRMS messaging (max. 160 characters)
- CLIP and Name display
- Overlap sending
- Enquiry
- DTMF and call progress tones
- Message waiting indication
- Downloadable software
- Plug-and-play installation
- Flexible assignment of channels
- Multicast or unicast over WAN

External antenna

To fine tune coverage in difficult locations, an external directional antenna can be connected by means of the AP200E.



Outdoor housing

For widespread coverage across your whole campus, in car parks and between buildings, both the AP200 and AP200E can be wall-mounted in a weatherproof outdoor housing.

G.729A compression

Support of the G.729A compression by the AP200 ensures that the load on the IP network is reduced significantly. Especially when bandwidth is at a premium, for example when calls are to be routed over the WAN, it is advisable to use the offered compression mechanism.

The number of simultaneous G.729A supported calls for the DECT cluster can be increased via licenses.

Remote access points

The DECT Access Point (DAP) can be installed in branch office locations with connection to the main site via a WAN.

Capacity

- 12 simultaneous calls per AP200
- Max. 6000 DECT handsets per IP DECT network (depending on the number of handsets supported by the PBX this may be less)

DECT Site Survey

DECT Site Survey services assess your sites before you implement the solution, enabling you to:

- guarantee radio coverage of the geographical area concerned
- determine the number of DECT Access Points you require
- define the exact locations of the DECT Access Points

Network Readiness

Network Readiness services provide various levels of assessment so you can optimise your data network for IP telephony solutions. Before you implement the solution, we can help you to:

- expose any need for infrastructural improvements
 - identify any network availability concerns
 - indicate the expected call quality
 - pinpoint any network management challenges
 - unlock the promised value of IP telephony solutions
- reduce the risk of business disruptions

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 algorithms: G.711 and G.729A
- DTMF generation: H.245
- Multicast: IEEE 802

Air interface

- Audio algorithm: G.726 ADPCM
- Full non-blind slot DECT RF part, according to EN 301 406
- Frequency band:
 - 1880 - 1900 MHz10 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
- Optional: AP200E offers means to connect external, directional antennas. Portfolio includes an 8dB antenna
- Typical range: indoor 1200 sqm, outdoor 2400 sqm

Power supply

- Power over Ethernet (PoE): 36-60 V over spare wire pairs and phantom feed in accordance with IEEE802.3af
- Optional: external 1 port PoE Injector
- Power consumption: ≤ 6 W

Maintenance

- LED status indication
- Web based management tool
- Downloadable DAP 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: AP200, 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)
 - With optional outdoor box: Operation class 3.3 (-20° C to +50° C)
- Relative humidity < 90 % (non condensing)

Compliance

- Safety
 - EN60950-1: 2001/AS/NZS 60950.1:2003
 - EN50385
- Electro Magnetic Compatibility (EMC)
 - EN301489-1 and 6
 - EN61000-3-2/3 (AC supply)
- DECT
 - EN301406 V1.4.1: 2001-03
 - EN300757 (Service class 2)
 - ACA TS028

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

Call **131 632** or visit www.nec.com.au

About NEC Australia

NEC has had a dedicated Australian presence since 1969, designing world class communication solutions. A wholly owned subsidiary of the NEC Corporation, Japan, NEC is a global R&D centre and major exporter in its own right. NEC Australia has combined its proud Australian heritage and global expertise to become a leading innovator and supplier of integrated voice and data solutions – including IP telephony, contact centres and managed services – to the Australian market.