



Base station, BS340

Versions

- BS340 Standard for use with DECT in the 1880-1900 MHz frequencies

Features

- DECT GAP/CAP radio interface
- Can handle 8 simultaneous calls
- Supports Messaging, Alarm and Interactive Messaging
- Supports Broadcast and Multicast messaging
- Supports non-blocked messaging channels
- Connection to PBX or radio exchange via 2 twisted pairs
- Connector for extra directional antenna
- Delivered with standard omni-directional external antennas
- Powering via data lines and optionally extra lines
- Low power consumption
- Distances between the telephone system and base stations of up to 1.9 km
- Easy software upgrade
- External LED status indication
- Compact lightweight design
- Easy installation in minimal space to flat or round surfaces

The BS340 can be characterized as a compact, lightweight and easy to install DECT base station. It comes with two external antennas that provide a spherical coverage pattern.

BS340 base station is compatible with DCT1800, Enterprise Mobility Node, BusinessPhone, MD Evolution and MD110 cordless system solutions. The BS340 provides high-quality DECT coverage for business applications and is fully software upgradable as well as GAP/CAP-compatible. Optimized for indoor use, the base station is designed as a single compact unit. It is small, light and makes mounting easy in almost any location. The possibility of mounting other antenna types like high gain omni-directional or directional antennas increases coverage for special application areas.

Antennas

The BS340 has two external antennas that can be replaced with other types depending on application area. At any time during the transmission or reception cycle only one antenna is active. However, fading of the radio signal is corrected by switching to the other antenna for transmission and reception. This switching,

also called spatial and polarisation diversity can be done per time slot and results in a more stable radio performance and hence better speech quality.

Note, this also means that when any combination of external antennas are used they must face or cover the same area.

Interface

The connection between the base station and the radio exchange is established via two proprietary U-interfaces (2B+D). Each U-interface uses one twisted pair. The two bi-directional U-interfaces provide a data rate of 128 kbits/s for speech each, which is sufficient for 8 simultaneous calls.

Connectors

The BS340 has two MCX connectors for external antennas, two RJ45 connectors for data/power and one RJ12 connector for PC. The two data/power connectors are interconnected inside the base station. This arrangement allows connection of more than one cable to the base station, for instance one for data and one for powering.

Distances

The maximum length of the cable between the radio exchange and the basestation depends on the supply voltage, the wire thickness of the twisted pair cables and the number of express power pairs used. The length of the cable between the telephone system and base stations can be up to 1.9 km. The radio coverage radius of the base station depends on the propagation characteristics, type of antennas that are used and varies between 20 m and 300 m with the standard external antennas.

Easy software upgrade

The software of this base station resides in programmable non-volatile memory. This memory can be programmed using the Cordless System Manager, Base Station Manager as well as management tools for the Integrated PBX solutions (BusinessPhone, MD Evolution or MD110).

Power

When powering the base station from the PBX or radio exchange, the voltage offered to the base station may vary, depending on the distance between base stations and radio exchange (i.e. power supply). The base station requires a minimum voltage of 21 Vdc. The maximum input voltage that can be offered to the base station is 56 Vdc. The polarity of the supply voltage is not important.

Mounting

The base station has facility for mounting on a wall, ceiling or pole, using the same mounting bracket. The bracket can be secured to the supporting surface first and then the base station can be fixed on the bracket, making base station fitting and exchange relatively simple

Specifications

Specifications subject to change without prior notice.

Physical

Dimensions:	200 (w) x 165 (d) x 56 (h) mm
Weight:	496 grams (incl. Standard external antennas)
Material:	ABS moulded plastic
Colour:	light grey
Connectors:	two RJ45 connectors for data/power, one RJ12 connector for factory testing purposes.
Size standard antenna:	107 (l) x 8.5 (d) mm
Weight standard antenna set:	17 grams
Antenna connectors (Base Station):	MCX SMT type female receptacle from Amphenol (KJMCX625100-002-3GT30G-50; gold plated)
Antenna connectors (Antenna):	MCX straight crimp male plug from Amphenol (919-101P-51S1X; gold plated)
Material:	ABS moulded plastic

Environmental


Operating temperature:	-10 to +55 °C
Storage temperature:	-40 to +70 °C
Relative operating humidity:	15 to 90%, non condensing
Relative storage humidity:	5 to 95%, non condensing

Functional

Operating voltage:	21 to 56 Vdc
Power consumption:	typical 3 W maximum 5 W
RF output power (e.r.p.):	between 19 dBm and 24 dBm
Receiver sensitivity:	at least -86 dBm at B.E.R. = 10 ⁻³

Compliance to European regulations and standards

CE regulation:	1999/5/EC, Radio & Telecommunications Terminal Equipment (R&TTE) Directive 89/336/EC Electromagnetic Compatibility Directive (EMC) 73/23/EC Low Voltage Directive (LVD)
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Conformity marking:	CE 
DECT standard:	EN 301 406:2001 (DECT) EN 300 444:2001 (TBR22 GAP)
Safety standard:	EN 60 950-1:2001
EMC standard:	ETS 301 489-6:2002

Accessories

Directional single antenna



Directional dual antenna



Omnidirectional single antenna



Outdoor housing



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