



Base station, BS330

Versions

- BS330 Standard for use with DECT in the 1880-1900 MHz frequencies
- BS330 PRC (Public Republic of China) for use with DECT in the 1900-1920 MHz frequencies
- BS330 LA (Latin America) for use with DECT in the 1910-1930 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
- 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
- Internal antennas
- External LED status indication
- Compact lightweight design
- Easy installation in minimal space to flat or round surfaces

The basic function of the base station is the transmission and reception of DECT radio signals. To this end the base station is equipped with a radio, capable of accessing 120 radio channels. The base station is controlled and powered from the radio exchange via two twisted pairs. Extra power pairs can be used to increase the powering range of the base station. The base station can also be powered using a simple AC-adaptor.

This base station is designed for indoor use and is compatible with the DCT1800, Enterprise Mobility Node, BusinessPhone, MD Evolution and MD110 cordless system solutions.

Antennas

The BS330 has two internal antennas. 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.

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

Two RJ45 and one RJ12 modular 'jack' type connectors are located on the rear of the base station. The two RJ45 jacks are for data/power connection the RJ12 jack is for connection to 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 and varies between 20 m and 300 m.

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 :	470 grams
Material :	ABS moulded plastic
Colour :	light grey

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 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).

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



Ascom Tateco AB
Wireless Solutions
PO Box 8783 SE-402 76 GÖTEBORG
T -46 31 55 94 00 F +46 31 55 63 78
www.ascom.com/ws

ascom