



Ascom BS330 base station

FEATURES

- **1920-1930 MHz frequencies**
- **Eight simultaneous calls**
- **Messaging, Alarm, Interactive Messaging**
- **Broadcast and Multicast messaging**
- **Supports non-blocked messaging channels**
- **Connection to radio exchange via two twisted pairs**
- **Powered via data lines and optional extra lines**
- **Low power consumption**
- **Distances between the radio exchange system and base stations of up to 6,200 ft.**
- **Easy software upgrade**
- **Internal antennas**
- **External LED status indication**
- **Compact lightweight design**
- **Easy installation in minimal space to flat or round surfaces**

The essential function of the base station is the transmission and reception of radio signals. To this end, the base station is equipped with a radio capable of accessing 60 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 adapter. This base station is designed for indoor use and is compatible with the DCT1900^{Mini+} and DCT1900⁺ systems.

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 polarization 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 or power connection the RJ12 jack is for connection to PC. The two data or 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 base station 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 radio exchange system and base stations can be up to 6,200 ft. The radio coverage radius of the base station depends on the propagation characteristics and varies between 100 to 1000 ft.

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 or Base Station Manager.

Power

When powering the base station from the 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. 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.

For more information

To learn more about Ascom products and solutions, visit ascomwireless.com. To speak to an Ascom representative about potential productivity gains at your facility, call 877-71ASC0M.

Specifications

Dimensions	7.87" x 6.5" x 2.2"
Weight	17 oz.
Material	ABS moulded plastic
Color	light grey
Operating temperature	-50 to 131 °F
Storage temperature	-40 to 158 °F
Relative operating humidity	15 to 90%, non-condensing
Relative storage humidity	5 to 95%, non-condensing
Operating voltage	21 to 56 Vdc
Power consumption	typical 3 W, maximum 5 W
RF output power (e.r.p.)	19 dBm to 24 dBm
Receiver sensitivity	-86 dBm at B.E.R. = 10 ⁻³
EMC standard	FCC Part 15

Specifications subject to change without prior notice.

Accessories



Outdoor mounting kit NTM2011718