



## ASCOM FREESSET BS330 BASE STATION DEDICATED WIRELESS COMMUNICATION FOR IP-DECT GATEWAY



### Ascom BS330 Features

1920-1930 MHz frequencies
Eight simultaneous calls
Messaging, Alarm, Interactive Messaging
Supports non-blocked messaging channels
Connection to IP-DECT gateway via two twisted pairs
Powered via data lines and optional extra lines
Low power consumption
Distances between the IP-DECT gateway and base stations of up to 4,900 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 IP-DECT gateway via two twisted pairs. Extra power pairs can be used to increase the powering range of the base station. This base station is designed for indoor use and is compatible with the Freeset IP-DECT gateway 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 IP-DECT gateway 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 IP-DECT gateway 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 IP-DECT gateway and base stations can be up to 4,900 feet. 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 and is easily updated from the Web-based administration interface of the IP-DECT gateway.

## Power

When powering the base station from the IP-DECT gateway, the voltage offered to the base station may vary, depending on the distance between base stations and the IP-DECT gateway (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

Designed with flexibility in mind, the BS330 mounting bracket can be secured to a wall or ceiling, then the base station may be fixed to the bracket, making fitting and exchange simple.

## For more information

To learn more about Ascom products and solutions, visit [ascomwireless.com](http://ascomwireless.com). To speak to an Ascom representative about potential productivity gains at your facility, call 877-71ASCOM.

Ascom BS330 Technical Specifications	Accessories
<b>Dimensions:</b> 7.87" x 6.5" x 2.2"	 <p data-bbox="1143 1570 1430 1591">Outdoor mounting kit NTM2011718</p>
<b>Weight:</b> 17 oz.	
<b>Material:</b> ABS moulded plastic	
<b>Color:</b> light grey	
<b>Operating temperature:</b> -50 to 131 °F	
<b>Storage temperature:</b> -40 to 158 °F	
<b>Relative operating humidity:</b> 15 to 90%, non-condensing	
<b>Relative storage humidity:</b> 5 to 95%, non-condensing	
<b>Operating voltage:</b> 21 to 56 Vdc	
<b>Power consumption:</b> typical 3 W, maximum 5 W	
<b>Receiver sensitivity:</b> -86 dBm at B.E.R. = 10 <sup>-3</sup>	
<b>EMC standard:</b> FCC Part 15	

Specifications are subject to change without notice.