

Product description Bluetooth „Gigaset B427 data“

This product consists of two parts. The one is the „Gigaset B427 data“ itself, the other is the upper layer Bluetooth software for Microsoft Windows 98 / 2000 based personal computers.

The „Gigaset B427 data“ contains a small printed circuit board, the Bluetooth baseband hardware including firmware and the RF-part. The housing is made of PC-ABS plastic with rubber feets for desktop use and a self adhesive strip for mounting at a laptop computer.

The „Gigaset B427 data“ has to be connected to the computer with a type A USB connector. The cable is directly mounted to the „Gigaset B427 data“, so that there is no type B connector.

The main units of the „Gigaset B427 data“ are the following:

1. RF-part for transmitting and receiving data in the 2,4 GHz ISM band. The RF-part is in compliance with the Bluetooth Requirements in Spec 1.0b. The transmitter is capable of +20 dBm (100 mW) transmit power. It has a built in power control according to the Bluetooth Spec.
2. Bluetooth baseband chip and FLASH memory for data preparation.
3. Firmware for the baseband controller, stored in the FLASH. This firmware covers all layers up to the HCI interface. It also has the algorithm for the built in power control for the transmit amplifier.
4. USB interface, electrical as well as mechanical (type A connector).

The upper layer software for the PC has to be installed from a compact disk by the user. The operating system on the PC has to be Microsoft Windows 98 or Microsoft Windows 2000. Beside the Bluetooth protocol stack, the software contains a small configuration utility to enable the user to connect his own Applications to the virtual COM-port given by the stack. There is no application delivered with the „Gigaset B427 data“. The „Gigaset B427 data“ can only be used for data applications. Voice transmissions are not supported by the Bluetooth stack implemented, although the hardware is able to transmit and receive SCO type packages, which would be necessary for voice.

The table shows an overview to the features:

Air Interface	Bluetooth air interface according Spec. 1.0b or higher; point to point connection
Range	ca. 100 m (20 dBm max. transmit power, power control)
Power supply	External from Host, 4,7... 5,5 V according USB-Spec. Power-Management, to reduce power consumption
Supported Applications (not included in the product)	<ul style="list-style-type: none"> - Connection to networks for data transmissions or internet services - Synchronisation, Objekt Exchange, File Transfer (local) - Communication with peripherals (proprietary solution, planned as simple cable replacement,

	no guarantee for functionality, has to be checked for every application)
Supported protocols	Physical Layer, Link Manager and HCI in firmware HCI, L2CAP, RFCOMM, SDP, Bluetooth advisor in PC software on compact disc.
Supported profiles	Generic Access Profile, Service Discovery Profile, Serial Port Profile, Generic Object Exchange, File Transfer, Object Push, Synchronization Profile, Dial up Networking und FAX LAN-Access
Not supported profiles	Headset, TCS
Firmware variants	No Firmware variants planned Software updates / upgrades on CD have to be discussed
Interfaces hardware	USB Interface
Interfaces software	HCI interface, in the „Gigaset B427 data“ as well as in the protocol stack on the PC. Interface for applications: VCOMM
LED	A LED for showing activities on air is not planned for the first version of the „Gigaset B427 data“
Antenna	Internal
Environmental conditions	Indoor use only Temperature: +5°C...+40°C Humidity: 20%...85%rel. According to IEC 721 3K3 EMC: to be clarified
Mechanical construction	Dimensions ca. 85mm x 43mm x 10mm Cable directly connected to device, length 20 cm Type: double shielded USB cable for high speed devices Shieldings Three separate shieldings for baseband, RF-part and power amplifier
Host systems	PCs, Laptops, etc. with USB interface. Operating systems Windows 98, Windows 2000