



HV Sistemas S.L.

Trustworthy radio data transmission

industrial radiomodem P8503

This radiomodem presents a high reliability and flexibility due to the intelligent integration between radio and modem.

P8503 radiomodem has a wide range of user selectable options, that enables to optimize it for almost any application. This permits to keep the maximum data integrity, minimizing lost of data and thus providing high communications reliability.

This radiomodem works in a license-free band, making it easy to implement in different infrastructures.



In the other side, thanks to its different power options, makes possible to use the radiomodem for short distance (e.g., zone control, machines control or remote control in factory), and also in applications where the distance from transmission place to the control centre is larger. This is the case for telemetry applications, environmental supervision, data sensors transmission, remote control automation or supply and water purification where could be necessary to reach till 5 kilometres.

Specifications*

Power supply voltage	8-32Vdc, protected with diode and fuse
Power supply current	<25mA @ 12Vdc (stand-by), <300mA @ 12Vdc (TX 869.525MHz 500mW)
Modulación	GFSK, BT 0,5
TX Power	500mW @ 869.525MHz, 25mW in all other channels and operating modes
Antenna Connector	SMA female
Antenna Impedance	50 Ohm
Data over radio baud rate	4800, 9600 and 19200 bps, depending on selected channel and operating mode
Data over radio format	Synchronous with forward error correction and CRC check
Data interface	RS-232 incorporating hardware flow control, optionally RS-422/RS-485
Data buffer size	4096 bytes TX, 4096 bytes RX
Serial baud rate	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200 bps
Serial data format	Asynchronous, 7 or 8 bits per word, parity none, odd, even, mark or space
Special functionalities	Point to point data link either direct or through repeaters, broadcast and multicast data transmission
Frequencies and operating modes	868.325 MHz, 4800bps, 25mW 868.650 MHz, 4800bps, 25mW 868.025 – 869.175MHz, 9600bps, 25mW (22 channels) 868.025 – 869.175MHz, 9600bps, 25mW (modo FHSS mode) 869.525 MHz, 19200bps, 500mW 868.025 – 869.175MHz, 19200bps, 25mW (modo FHSS mode)
Operating range (free field)	1Km (25mW operating modes), 5Km (500mW operating modes)
Size	63 x 30 x 88 mm (excluding connectors)

* Specifications subject to change without notification