

ULTRACOM UC400 RADIO MODEM



ULTRACOM UC400

RADIO MODEM

ULTRACOM UC400 is a small and versatile UHF data radio modem which provides reliable wireless data communication between two or more terminals. The ULTRACOM UC400 is fully PC compatible and it can be used with the RS232 or RS485 interfaces. The settings of the radio modem can be configured through the PC, without changing the hardware. The modem can be configured to operate with 10 or 11 bit characters and varying amounts of data, start and stop bits can be chosen within these character lengths. Data speed can be selected between 300 – 9600 b/s. The selection of RS interface is also done through the PC.

The length of data packets is not limited with the ULTRACOM UC400 radio modem. Because of an internal buffer, the ULTRACOM UC400 can be used with terminals that do not support handshaking. The ULTRACOM UC400 radio modem consists of a radio transceiver board (comprises a transmitter and receiver) and a processor controlled modem board housed in an aluminium casing.

A suitable link hop distance is essentially dependent on environmental conditions, the antennas and their directivity. When using the ULTRACOM UC400 radio modem and helix "rubber duck" antenna, the coverage is up to 3 km and using directional antenna with the coverage is up to 25 km in suitable conditions. The maximum coverage of ULTRACOM UC400 ISM radio modem is approximately 5 km in suitable conditions.

SPECIFICATIONS	UC400 RADIO MODEM	UC400 ISM RADIO MODEM
Designed according to	EN 300 113-2 requirements	EN 300 220-3 requirements
Data speed	300 – 4800 b/s or 300 – 9600 b/s depending on channel spacing	300 – 9600 b/s
Frequency range	400 – 470 MHz, one or two channels, preselected by crystals	433.050 – 434.790 MHz, one or two channels, preselected by crystals
Channel spacing	12,5 kHz or 25 kHz	25 kHz
RF-output power	400 mW	10 mW
Data formats	Asynchronous data character length: 10 or 11 bits	Asynchronous data character length: 10 or 11 bits
Modulation	FSK (Frequency Shift Keying)	FSK (Frequency Shift Keying)
Nominal deviation	± 2.5 kHz on 25 kHz channel spacing ± 1.5 kHz on 12.5 kHz channel spacing	± 5 kHz on 25 kHz channel spacing
Temperature range	- 25 – + 55°C operating	- 25 – + 55°C operating
Stability	± 2.0 kHz - 25 – + 55°C on 25 kHz and ± 1.0 kHz -25 – + 55°C on 12.5 kHz channel spacing	± 2.0 kHz - 25 – + 55°C on 25 kHz channel spacing
Sensitivity	Better than IE-2 at -110 dBm RF input level	Better than IE-2 at -110 dBm RF input level
Antenna connector	50 ohm TNC female	50 ohm TNC female
Data interface	RS232 or RS485, D25 female	RS232 or RS485, D25 female
Operating voltage	+ 9 – + 15V DC	+ 9 – + 30V DC
Current consumption	Approx. 60 mA receiving, Approx. 350 mA transmitting	Approx. 60 mA receiving, Approx. 110 mA transmitting
Dimensions	65x110x32 mm	65x110x32 mm
Weight	250 g	250 g

Specifications are subject to change.



ULTRACOM OY

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The rubber duck antenna is not included in the price of radio modem.