Tersus 2W Radio RS460H

Wireless Data Transceiver

Overview

The Tersus 2W radio RS460H is a radio solution for both the base and the rover. It provides reliable data communications for mission-critical applications where a combination of stability, superior performance and long distance are required.

The RS460H is a lightweight, ruggedized UHF receiver designed for digital radio communications between 410 MHz and 470 MHz with 12.5/25 KHz channel spacing, which can be used widely in GNSS/RTK surveying and precise positioning system applications. The RS460H is equipped with a LED display and a keypad which is used for checking the operating status, changing the operating channel, and transmitting power level. It is easy to operate.

Key Features

- Wide frequency range of 410-470 MHz
- Advanced data link design for high performance over entire bands
- Software-derived channel bandwidth
- Compatible with 25 KHz channel radios
- High air link rate
- All metal heavy-duty construction
- Wide temperature range

Technical Specifications

General

Frequency range:	410MHz ~ 470MHz
Channel spacing:	12.5KHz / 25KHz
Modulation type:	GMSK, 4FSK
Operation voltage:	5V~12V
Power consumption (typical):	
– Transmitting 2W:	6W@5V DC
– Transmitting 1W:	5W@5V DC
– Receiving:	0.5W@5V DC
Dimension:	107x62x26.6mm
Weight:	≈200g
Operation temperature:	-30℃ ~ +60℃
Storage temperature:	-40℃ ~ +85℃
Antenna port:	TNC Female
Antenna impedance:	50Ω
VSMR:	≤ 1.5

Interface (Pin) Definition

Type:	RS232
Pin 1:	Power Ground, GND
Pin 2:	Power Ground, GND
Pin 3:	Power, 5V~12V DC
Pin 4:	RXD
Pin 5:	TXD

Transmitter

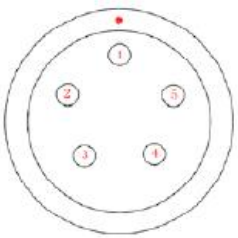
RF output power:	
– High power (2W):	33.5±0.5dBm@5V DC
– Low power (1W):	30.5±1.0dBm@5V DC
Power stability:	±1dB
Distance （Typical）:	5-7KM

Receiver

Sensitivity:	115dBm@BER 10^{-3}, 9600bps
Co-channel rejection:	>-12dB
Adjacent channel selectivity:	>50dB@25KHz

Modem

Air baud rate:	19200/9600/4800bps
Serial baud rate:	115200/38400/19200/9600bps
Radio protocol:	TrimTalk450, TrimMark3, South, Transparent, Satel



Overview of Interface (Pin)

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