RS400H2

Wireless Data Transceiver, 25W Radio for Oscar

Overview

The Tersus RS400H2 radio is a base radio solution for wireless applications. It provides reliable data communications for mission-critical applications where a combination of stability, superior performance and long range are required.

The RS400H2 provides high speed, high power, wireless data links and has been designed to survive the rigors of GNSS/RTK surveying and precise positioning applications. Up to 25W transmit power maximizes range and supports operation in difficult urban areas. The RS400H2 is equipped with LEDs display and keypads which are used for checking the operating status, changing the operating channel, and transmitting power level.

Key Features

60 MHz bandwidth coverage 410-470 MHz bands

Advanced data link design for high performance over entire bands

Multi-function user interface

It is designed for easy mobile use in demanding field conditions

Configurable transmit power

Supports 5W and 25W power switching

Software-derived channel bandwidth

Compatible with 12.5KHz and 25KHz radios

High environmental protection rating of IP67

Technical Specifications

General

Frequency range:	410~470MHz
Channels:	8
Operating mode:	Simplex
Channel width:	25KHz, 12.5KHz
Modulation type:	GMSK
Operation voltage:	9~16V DC
Power consumption (typical):	
– High Power Level (25W)	75W @ DC12V
– Low Power Level (5W)	35W @ DC12V
– Standby:	1.5W@DC12V
Frequency Stability:	≤±1.0ppm
Antenna Port:	TNC Female
Antenna Impedance:	50Ω

Physical

Dimension:	186x140x73mm
Weight:	≈1.4kg
Data Interface:	LEMO 5pin
Installation:	Hook

Environmental

Operation Temperature:	-40℃ ~ +65℃
Storage Temperature:	-55℃ ~ +85℃
Dust and Water Proof:	IP67

Transmitter

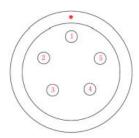|	
Power consumption (typical):	
– High Power Level (25W)	44±0.5dBm@DC12V
– Low Power Level (5W)	37.5±1dBm@DC12V
Power Stability:	±1dB
Harmonics:	<-30dBm
Distance(Typical):	12-15KM

Modem

Air Baud Rate:	4800 / 9600 / 19200 bps
Modulation Type:	GMSK
Serial port baud rate:	9600/19200/38400/57600/115200 bps
Protocol:	TrimTalk450, TrimMark 3, South, Transparent, Satel

Data Interface Definition

Type:	RS232
Pin 1:	Power, 9~16V DC
Pin 2:	Power Ground, GND
Pin 3:	Serial data receiver, RXD
Pin 4:	Signal Ground, GND
Pin 5:	Serial data transmission, TXD

Note: this figure is a view from outside to the radio.