



RS400L30

30W Radio

Overview

The Tersus RS400L30 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 RS400L30 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 30W transmit power maximizes range and supports operation in difficult urban areas. The RS400L30 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

10 MHz bandwidth coverage over 457-467 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, 10W, 20W and 30W power switching

Software-derived channel bandwidth

Compatible with 25 kHz channel radios

High environmental protection rating of IP68



Technical Specifications

General

Frequency Range:	457MHz~467MHz
Operating Mode:	Half-duplex
Channel Spacing:	25KHz
Operation Voltage:	10.5V~16V DC
Power Dissipation (typical):	
– High Power Level:	
30W:	≤85W@DC12V
20W:	≤65W@DC12V
– Low Power Level:	
10W:	≤46W@DC12V
5W:	≤33W@DC12V
– Standby:	≤3.0W@DC12V
Frequency Stability:	≤±1.0ppm
Size:	186x140x73mm
Weight:	≈1.75kg
Operation Temperature:	-30°C ~ +60°C
Storage Temperature:	-40°C ~ +85°C
Dust and Water Proof:	IP68
Antenna Port:	TNC Female
Antenna Impedance:	50Ω
Data Interface:	LEMO 5pin

Other

Co-channel Rejection:	>-12dB
Adjacent Channel Selectivity:	>50dB@12.5KHz
Spurious Response Immunity:	>55dB

Transmitter

Power Dissipation (typical):	
– High Power Level:	
30W:	45.0±0.5dBm@DC12.8V
20W:	43.0±0.5dBm@DC12.8V
– Low Power Level:	
10W:	40.5±1dBm@DC12.8V
5W:	37.5±1dBm@DC12.8V
– Standby:	≤1.5W@DC12.8V
Power Stability:	±1dB
Harmonics:	>50dB

Modem

Air Baud Rate:	9600bps
Modulation Type:	GMSK

Data Interface Definition

Type:	RS232
Pin 1:	Power Ground, GND
Pin 2:	Power Ground, GND
Pin 3:	Output Power, 3A
Pin 4:	RXD
Pin 5:	TXD

