XDL Rover 2

HIGH PERFORMANCE WIDE-BAND DATA LINK

The XDL Rover 2 is a lightweight, ruggedized UHF receiver designed for digital radio communications between 403 and 473 MHz in either 12.5 or 25 kHz channels. This sophisticated radio utilizes Pacific Crest's latest generation XDL modem technology while remaining backward compatible with existing Pacific Crest and other products.

XDL Rover 2 is equipped with a Bluetooth® transceiver for cable-free communications with external devices. A serial API via the Bluetooth SPP is available for OEM developers wishing to create configuration applications for handheld computers such as Android™ devices. An example configuration app is available for select Android devices. Serial communications is also supported by the XDL Rover 2's standard LEMO port. Using the latest modem technology from the leader in radio frequency data communications instantly puts your products in touch with the world's largest installed base of GNSS precise positioning systems.

Key Features

▶ Bluetooth® enabled
 • Field configurable with an Android app
 • UHF data transmission over Bluetooth to external devices
▶ 70 MHz bandwidth Coverage 403-473 MHz Bands
 • Advanced data link design for high performance over entire band
▶ High Over-the-Air Link Rate
 • 9600 bps in 12.5 kHz channels
 • 19,200 bps in 25 kHz channels
 • Supports 1Hz RTK corrections for multi-GNSS receivers
▶ Software-Derived Channel Bandwidth
 • Compatible with both 12.5 and 25 kHz radios
▶ High Environmental Capabilities
 • Waterproof to IP67
 • High vibration tolerance
 • Wide temperature range
▶ Pocket sized for ultimate portability
▶ Internal rechargeable battery
 • Powers receiver for up to 14 hours

XDL ROVER 2 radio

GENERAL SPECIFICATIONS

- Communications
  - Data Power
    - > RS-232 port
    - > 115.2 bps maximum
    - > 5 pin, size 0, LEMO
  - Wireless
    - > Bluetooth

RADIO SPECIFICATIONS

- Frequency Band
  - 403-473 MHz
- Frequency Control
  - Synthesized 6.25 kHz tuning resolution
- Frequency stability +/- 1 PPM
  - 12.5 kHz and 25 kHz, software derived
- Sensitivity
  - -110 dBm BER 10^{-5}
- Type Certification
  - Type accepted and certified for operation in the U.S, Canada, Europe, Australia and New Zealand

MODEM SPECIFICATIONS

- Link Rate/Modulation
  - 4 Level FSK
    - > 9600 bps
    - > 19,200 bps
  - GMSK
    - > 4800 bps
    - > 8000 bps
    - > 9600 bps
    - > 16,000 bps
    - > 19,200 bps
- Link Protocols
  - Transparent EOT/EOC
  - Packet-switched
  - TRIMMARK™
  - TRIMTALK™
  - SATEL®
  - Stonex
- Forward Error Correction
  - Yes

ENVIRONMENTAL

- Operating Temperature
  - -20 °C to +60°C (–4 °F to +140 °F)
- Charging Temperature
  - -0 °C to +25 (+32 °F to +77°F)
- Storage Temperature
  - -20 °C to +60°C (–4 °F to +140 °F)
- Shock and Vibration
  - MIL-STD-810F

POWER

- Internal
  - 2550 mAHr Li-ion rechargeable battery
- During RX
  - 0.55 Watts nominal @3.7 VDC
- Input Voltage Range
  - 10.5 - 28 VDC

PHYSICAL

- Dimensions
  - 14.2 cm H X 8.4 cm X 2.8 cm
    5.60 in X 3.30 in X 1.10 in
- Weight
  - 270 gm (0.60 lbs)

BLUETOOTH SPECIFICATIONS

- Supported Versions
  - 2.1, 2.0
- Profiles
  - Serial Port Profile (SPP)
- Security
  - Simple Secure Pairing (SSP)
- Antenna
  - Internal Onboard Antenna

ORDERING INFORMATION

- XDL Rover 2   86759-11

Specifications subject to change without notice.