ADL Vantage Pro

Datasheet

High Performance Advanced Data Link for Field Communications

Key Features

- **Configurable Transmit Power**
- **Multi-Function User Interface**
- **Heavy-Duty Construction**
- **High Over-the-Air Link Rate**
- **Advanced 40 MHz Bandwidth**
- **Software-Derived Channel Bandwidth**

ADL Vantage Pro

ADL Vantage Pro is an advanced, high speed, high power, wireless data link built to survive the rigors of GNSS/RTK surveying and precise positioning. This sophisticated 2 - 35 Watt radio modem utilizes Pacific Crest's next generation Advanced Data Link (ADL) technology while remaining backward compatible with existing Pacific Crest, Trimble and other radios.

ADL Vantage Pro's 35 Watts of power maximize range, enabling you to work in difficult terrain and urban areas. Its full-function user interface streamlines field configuration and troubleshooting so you can maintain maximum productivity. For the most rugged and reliable long range data link, go with the Geomatics industry's new standard in wireless communications – ADL Vantage Pro.

ADL Vantage Pro Technical Specifications

General Specifications

- Communication 1 RS-232 port,
  - 115.2 kbps maximum
- User Interface
  - 5 navigation buttons with LCD display
  - 2-row LCD display with 16-characters (English or Cryllic) or 8 characters (Chinese)

Power

- External
  - 9.0 – 30.0 VDC, 15 Amp maximum
- During RX
  - 1.7 Watt s nominal @ 12.0 VDC
- During TX
  - 130 Watts nominal @ 12.0 VDC, 35W RF output
  - 55 Watts nominal @ 12.0 VDC, 8W RF output
  - 8 Watts nominal @ 12.0 VDC, 2W RF output

Modem Specification

- Link Rate/Modulation
  - 19,200 bps/4FSK
  - 9600 bps/4FSK
  - 19,200 bps/GMSK
  - 16000 bps/GMSK
  - 9600 bps/GMSK
  - 8000 bps/GMSK
  - 4800 bps/GMSK
- Link Protocols
  - Transparent EOT/EOC, Transparent FST , Packet-switched, TRIMMARK™, TRIMTALK™, TT450S (HW), SATEL®
- Forward Error Correction: Yes

Radio Specification

- Frequency Bands
  - 390-430, 430-473 MHz
- Frequency Control
  - Synthesized 6.25 kHz tuning resolution
  - Frequency stability: +/- 1 ppm @ -40 to +85°C
- Channel Bandwidth
  - 12.5 kHz and 25 kHz, software derived
- RF Transmitter Output
  - Programmable to 2 - 35 Watts (where permittted)
- Sensitivity
  - -110 dBm BER 10^{-5}
- Type Certification
  - Type accepted and certified for operation in the U.S., Canada, Europe, Australia, New Zealand, Russia and Brazil

Environmental Specifications

- Enclosure
  - IP67 (Watertight to depth of 1 meter for 30 minutes)
- Operating Temperature (RX)
  -30 °C to +65 °C (–22 °F to +149 °F)
- Operating Temperature (TX@35W)
  -30 °C to +55 °C (-22 ° F to +131 °F)
- Storage Temperature
  -30 °C to +85 °C (–22 °F to +185 °F)
- Vibration Specification
  MIL-STD-810F

Mechanical Specifications

- Dimensions
  - 11.9 cm L x 8.6 cm W x 21.3 cm H
  - 4.7" L x 3.4" W x 8.37" H (with handle)
- Weight
  - 1.95 Kg (4.3 lbs.)
- Data/Power Connector
  - 5-pin, #1-shell LEMO-style
- RF Connector
  - 50 Ohm, TNC female

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Specifications and descriptions are subject to change without notice. Please visit www.spectraprecision.com for the latest product information.