



# ADL Vantage 35

## HIGH PERFORMANCE ADVANCED DATA LINK FOR FIELD COMMUNICATIONS

ADL Vantage 35 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. This radio'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 35.



### Key Features

- ▶ Configurable Transmit Power
  - As low as 2 Watt for longer battery life
  - As high as 35W for longer range
- ▶ Multi-function user interface
  - Allows radio configuration and troubleshooting in the field
  - Change configuration to adapt to changes in field equipment
- ▶ Heavy-Duty Construction
  - All metal construction for the ultimate in impact and EMI resistance
  - Environmentally sealed to IP67 standard
- ▶ High Over-the-Air Link Rate
  - 19,200 bps (both GMSK and 4FSK)
  - Supports 1Hz RTK corrections for multi-GNSS receivers
- ▶ Advanced 40 MHz Bandwidth
  - 390-430 and 430-473 MHz models
  - Advanced Data Link design for high performance over the entire band
- ▶ Software-Derived Channel Bandwidth
  - Compatible with both 12.5 and 25 kHz radios

## 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 Russian) or 8 characters (Chinese)

## RADIO SPECIFICATIONS

- 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 permitted)
- Sensitivity
  - -110 dBm BER 10<sup>-5</sup>
- Type Certification
  - Type accepted and certified for operation in the U.S., Canada, Europe, Australia and New Zealand (Models ADL35-1 and ADL35-2) and Brazil (Model ADL35-2)

## 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 FST™,
  - Transparent EOT/EOC
  - Packet-switched
  - TRIMMARK™
  - TRIMTALK™
  - TT450S (HW)
  - SATEL®
- Forward Error Correction
  - Yes

## ENVIRONMENTAL

- Enclosure
  - IP67 (Watertight to depth of 1 meter for 30 minutes)
- Operating Temperature
  - 30 °C to +65 °C (-22 °F to +149 °F)
- Storage Temperature
  - -30 °C to +85 °C (-22 °F to +185 °F)
- Shock and Vibration
  - MIL-STD-810F

## POWER

- External
  - 11-16 VDC, 15 Amp maximum
- During RX
  - 1.7 Watts nominal @ 12.0 VDC
- During TX
  - 115 Watts nominal @ 12.0 VDC, 35W RF output
  - 45 Watts nominal @ 12.0 VDC, 8W RF output
  - 25 Watts nominal @ 12.0 VDC, 2W RF output

## PHYSICAL

- 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

## ORDERING INFORMATION

- ADL Vantage 35 Radio 390-430 MHz 75451-39
- ADL Vantage 35 Radio 430-473 MHz 75451-43

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