

# Positioning Data Link™

## PDL™

### High Performance Data Link

Designed for Survey Systems

### 19,200 Baud Rate

Higher Over-the-Air Link Rate  
Extends Your Battery Life

### Enhanced User Interface

Change Channels in the Field  
View Status Information

### Compatible with GPS RTK Equipment Worldwide

Complete Kit Solutions Available  
for Your Application

### Reliable

Rugged, All Season Operation

### 2 Year Warranty

Lower Cost of Ownership



Surveyors utilizing Global Positioning Systems require a rugged radio modem data link for precise positioning information. The PDL is compact and lightweight and offers power efficient operation. It is easy to use, and provides high performance and rugged dependability for the toughest survey environments.

PDL Products are designed to easily mount on all standard tripods and range poles. Complete kit solutions are available.



# Positioning Data Link™

|                                     | High Power Base  | Low Power Base   | Rover  |
|-------------------------------------|--|--|--|
| <b>General Specifications</b>       |  |  |  |
| DTE – DCE Interface                 | 3 Wire, RS-232, 38.4k Baud Maximum.  |  |  |
| User Interface                      | On/Off Button.<br>Channel Button with AutoBase™ and AutoRover™<br>Digital Display.<br>Modem/Power Status Indicators.<br>RF Power Select Toggle Switch.   | On/Off Button.<br>Channel Button with AutoBase™ and AutoRover™<br>Digital Display.<br>Modem/Power Status Indicators. | On/Off Button.<br>Channel Button with AutoBase™ and AutoRover™<br>Digital Display.<br>Modem/Power Status Indicators. |
| <b>Power</b>                        |  |  |  |
| External                            | 9 – 16 VDC.  |  |  |
| Internal Battery                    | N/A.   | N/A.   | Lithium Ion Battery Pack.  |
| During TX (nominal)                 | 110 Watts.   | 11 Watts.  | N/A.   |
| During RX (nominal)                 | 1.9 Watts.   | 0.9 Watts.   | 0.3 Watts.   |
| <b>Antenna</b>                      |  |  |  |
| External                            | 50 Ohm, BNC.   | 50 Ohm, NMO.   | 50 Ohm, NMO.   |
| <b>Modem Specifications</b>         |  |  |  |
| Link Rate/Modulation                | 19,200 bps/4 Level FSK.<br>9600 bps/GMSK.<br>4800 bps/GMSK.  |  |  |
| Link Protocols                      | Transparent, Packet Switched, Digipeater, TRIMTALK™  | Transparent, Packet Switched, Digipeater, TRIMTALK™  | Transparent, Packet Switched, TRIMTALK™  |
| Forward Error Correction            | Hamming Code (12, 8) with Data Interleaving.   |  |  |
| <b>Radio Specifications</b>         |  |  |  |
| Frequency Bands                     | Refer to price list for available frequency bands.   |  |  |
| Frequency Control                   | Synthesized 12.5k Hertz Resolution.<br>±2.5 ppm Stability.   |  |  |
| RF Power Select                     | Low/High.  | Factory Programmable.  | N/A.   |
| RF Transmitter Output               | 2/35 Watts Maximum.  | 0.5 – 2 Watts.   | 0 Watt (Receive Only).   |
| Sensitivity                         | -116 dBm (12 dB SINAD).  |  |  |
| Adjacent Channel Selectivity        | -60 dB at 12.5k Hertz.   |  |  |
| Type Certification                  | All models are type accepted and certified for operation in the U.S. and Canada.<br>For detailed information concerning your country's type certification, please contact your sales representative. |  |  |
| <b>Environmental Specifications</b> |  |  |  |
| Operating Temperature               | -22° to +140° F (-30° to +60° C).  |  | -4° to +140° F (-20° to +85° C).   |
| Storage Temperature                 | -67° to +185° F (-55° to +85° C).  |  | -4° to +185° F (-20° to +85° C).   |
| Vibration/Shock                     | ANSI/ASAE EP455.   |  |  |
| Enclosure                           | IEC 144/855420 I.P. 66.<br>Water Tight and Dust Proof.   |  |  |
| <b>Mechanical Specifications</b>    |  |  |  |
| Dimensions                          | 6.23" W x 2.77" H x 6.58" L.<br>(15.8 cm W x 7.0 cm H x 16.7 cm L).  | 8.25" L x 2.40" Diameter.<br>(21.0 cm L x 6.1 cm Diameter).  | 8.25" L x 2.40" Diameter.<br>(21.0 cm L x 6.1 cm Diameter).  |
| Weight                              | 2.96 lbs. (1.34 Kg).   | 0.65 lbs. (0.30 Kg).   | 0.75 lbs. (0.34 Kg).   |
| Data/Power Connector                | 5 Pin LEMO #1 Shell.   | 5 Pin LEMO #0 Shell.   | 5 Pin LEMO #0 Shell.   |
| Mount                               | Tripod Bracket.  | 5/8" – 11 Range Pole.  | 5/8" – 11 Range Pole.  |



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