

# Positioning Data Link

Datasheet



Surveyors utilizing Global Navigation Satellite Systems require rugged radio modem data links for precise positioning information. PDL products are compact, lightweight and offer power-efficient operation. They are easy to use and provide 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.

## PDL

### High Performance Data Link

Designed for Survey Systems

#### 19,200 Baud Rate

High Over-the Air Link Rate

Extends Your Battery Life

#### Enhanced User Interface

Change Channels in the Field

View Status Information

### Compatible with GPS/GNSS RTK Equipment Worldwide

Complete Kit Solutions Available  
for Your Application

#### Rugged and Reliable

Waterproof

All-Weather Operation

	High Power Base	Low Power Base	Rover
General Specifications			
DTE - DCE Interface	3 Wire, RS-232, 38.4k Baud Maximum		
User Interface	On/Off Button* ("Auto Power On" enabled when connected to power source Channel Button with AutoBase™ and AutoRover™ Digital Display Modem/Power Status Indicators RF Power Select Toggle Switch	On/Off Button* ("Auto Power On" enabled when connected to power source Channel Button with AutoBase™ and AutoRover™ Digital Display Modem/Power Status Indicators	On/Off Button Channel Button with AutoRover™ Digital Display Modem/Power Status Indicators
Power			
External	9 – 16 VDC		
Internal Battery	N/A	N/A	Lithium Ion Rechargeable
During TX (nominal)	110 Watts (35W)	11 Watts (2W)	N/A
During RX (nominal)	1.9 Watts	0.9 Watts	0.3 Watts
Antenna			
External	50 Ohm, BNC	50 Ohm, NMO	50 Ohm, NMO
Modem Specifications			
Link Rate/Modulation	19,200 bps/4 Level FSK (25 kHz) 9600 bps/4 Level FSK (12.5 kHz) 9600 bps/GMSK (25 kHz) 4800 bps/GMSK (12.5 kHz)		
Link Protocols	Transparent, Packet Switched, Digipeater, TRIMTALK™	Transparent, Packet Switched, Digipeater, TRIMTALK™	Transparent, Packet Switched, TRIMTALK™
Forward Error Correction	Yes		
Radio Specifications			
Frequency Bands	Refer to price list for available frequency bands.		
Frequency Control	Synthesized 12.5 kHz Resolution ±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	-110 dBm BER 10 <sup>-5</sup>		
Adjacent Channel Selectivity	>65 dB (25 kHz), >55 dB (12.5 kHz)		>60 dB (25 kHz), >50 HdB (12.5 kHz)
Type Certification	All models are type accepted and certified for operation in the U.S. and Canada. For detailed information concerning your country's type certification, please contact your sales representative.		
Environmental Specifications			
Operating Temperature	-22° to +140° F (-30° to +60° C)		-4° to +140° F (-20° to +60° 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 Watertight and Dustproof		
Mechanical Specifications			
Dimensions	6.23" W x 2.77" H x 6.58" L (15.8 cm W x 7.0 cm H x 16.7 cm L)	8.25" L x 2.40" Diameter (21.0 cm L x 6.1 cm Diameter)	8.25" L x 2.40" Diameter (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



990 Richard Avenue, Suite 110, Santa Clara, CA 95050  
 Tel: 1.800.795.1001 (US & Canada) - +1.408.653.2070 (International - +31.725.764.175 (Europe)  
 Fax: +1.408.748.9984, Web: [www.pacificcrest.com](http://www.pacificcrest.com), Email: [sales@pacificcrest.com](mailto:sales@pacificcrest.com)

©2008 Pacific Crest Corporation. TRIMTALK™ is a trademark of Trimble Navigation Limited.  
 License required prior to operation of radio communication equipment. Specifications subject to change without notification.

M00526-03