DATASHEET

TRIMBLE PDL450 RADIO

KEY FEATURES

Geodetic control

Topography

Stakeout

Cadastral

Marine

High-precision GIS



A RADIO SOLUTION FOR GPS BASE STATIONS

HIGH-PERFORMANCE FLEXIBILITY

The Trimble® PDL450 radio is a radio modem data link designed specifically for use with GPS base stations. Trimble PDL450 is compact and lightweight, while still being rugged enough to provide high performance even in the toughest survey environments.

Easy to use and highly reliable, the Trimble PDL450 radio is capable of broadcasting or repeating real-time data used by Trimble GPS receivers, including the Trimble R8 and 5800, and the Trimble R7 and 5700. It is easily mounted on the same tripod as the receiver or on its own tripod using mounting hardware included as standard equipment.

LICENSING APPROVAL

The Trimble PDL450 radio is designed to meet the licensing and approval requirements (ETSI 300-113) in Europe as well as many other countries around the world.

RUGGED AND LIGHTWEIGHT

The Trimble PDL450 radio is built tough to withstand the harsh job site and weather conditions common in GPS RTK field surveying. Fully sealed against dust, rain, splash and spray, Trimble PDL450 keeps operating through all seasons and all applications.

Double-shock-mounted electronics enhance reliability, and built-in mounts simplify tripod mounting. Additional benefits of the radio's rugged construction include reduced downtime and ownership costs.

Despite its ruggedness, Trimble PDL450 is lightweight and compact enough to carry anywhere, weighing less than one pound.

REPEATER CAPABILITIES

In addition to its base station capabilities, Trimble PDL450 offers maximum flexibility as a repeater.

As a transmitter, under optimal conditions, Trimble PDL450 broadcasts data up to 10 km line-of-sight. Network coverage can be enhanced by the use of two repeaters.

As a repeater, Trimble PDL450 enables you to reach inaccessible or obstructed locations due to its extended range and seamless coverage around obstacles. Because it is so versatile, one extra radio can be used as a backup or as a "spare" for multiple tasks; this maximizes your uptime.



TRIMBLE PDL450 RADIO

TRIMBLE PDL450 BENEFITS

- Meets all ETSI 300-113 requirements
- Can be configured to operate in license-free bands in some European countries, making it extremely portable
- Durable construction can withstand harsh job site conditions
- Compactness and light weight further enhance portability
- Can be used as a repeater
- Compatible with Trimble internal UHF radios

TRIMBLE PDL450 GENERAL SPECIFICATIONS

DTE-DCE Interface	3 Wire RS-232, 38.4 kBd Maximum
User Interface	On/Off Button
	Channel Button
	Digital Display
	Modem/Power Status Indicators

POWER

External	9 V DC to 16 V DC
Internal Battery	N/A
During TX (nominal)	5 W to 11 W
During RX (nominal)	

ANTENNA

External	.50 ohm,	NMO
----------	----------	-----

MODEM SPECIFICATIONS
Link Rate/Modulation 19,200 bps/4 Level FSK (25 kHz)
9,600 bps/4 Level FSK (12.5 kHz)
9,600 bps/GMSK (25 kHz)
4,800 bps/GMSK (12.5 kHz)
Link Protocols Transparent, Packet Switched, Digipeater,
Fast Asynchronous, TRIMTALK™
Forward Error Correction
with Data Interleaving

RADIO SPECIFICATIONS

Frequency Bands Refer to price list for available frequency bands
Frequency Controls Synthesized 12.5 kHz Resolution
±2.5 ppm Stability
RF Power Select Factory Programmable
RF Transmitter Output
Sensitivity
Adjacent Channel Selectivity>-60 dB
Type Certification All models are type accepted and
certified for operation in the U.S., Canada, and Europe.
For detailed information concerning your
country's type certification, please contact
your sales representative

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	. –30 °C to +60 °C (–22 °F to +140 °F)
Storage Temperature	. –55 °C to +85 °C (–67 °F to +185 °F)
Vibration/Shock	ANSI/ASAE EP455
Enclosure	IEC 144/855420 I.P.66
	Watertight and Dust Proof

MECHANICAL SPECIFICATIONS

Dimensions	21.0 cm L × 6.1 cm Diameter
	(8.25 in L × 2.40 in Diameter)
Weight	0.30 kg (0.65 lb)
Data/Power Connector .	5 Pin LEMO #0 Shell

Specifications subject to change without notice.

© 2004–2005, Trimble Navigation Limited. All rights reserved. Trimble and the Globe & Triangle logo are trademarks of Trimble Navigation Limited, registered in the United States Patent and Trademark Office and in other countries. TRIMTALK is a trademark of Trimble Navigation Limited. All other trademarks are the property of their respective owners. Reorder PN 022543-0828 (0605)



NORTH AMERICA

Trimble Engineering &
Construction Group
5475 Kellenburger Road
Dayton, Ohio 45424-1099 ● USA
800-538-7800 (Toll Free)
+1-937-245-5154 Phone
+1-937-233-9441 Fax

EUROPE

Trimble GmbH

Am Prime Parc 11

65479 Raunheim ● GERMANY
+49-6142-2100-0 Phone
+49-6142-2100-550 Fax

ASIA-PACIFIC

Trimble Navigation
Singapore Pty Limited
80 Marine Parade Road
#22-06, Parkway Parade
Singapore 449269 ◆ SINGAPORE
+65-6348-2212 Phone
+65-6348-2232 Fax



¹ Before operating this radio modem, users are legally required to obtain frequency licenses as required by the country of use.