

# Trimble TDL450B

UHF DATA RADIO

Rugged and reliable  
UHF radio to transmit or  
receive GNSS corrections.



## Versatile and built to last

### Productive

Broadcasts, repeats and receives real-time data used by Trimble® GNSS receivers.

High over-the-air link rate keeps crews productive with less radio downtime.

Provides access to diagnostic data in the field, enabling you to solve signal strength challenges and make adjustments to stay more productive.

### Tough

Work with complete confidence no matter what the conditions, whether rain or dust, heat or cold.

A professional radio rated IP67 with military-spec design and full metal construction that ensures impact and weather resistance.

Operates from -30 °C to +65 °C (-20 °F to +150 °F).

### Flexible

Easy to configure, mounted on the same tripod as the receiver or on its own tripod.

Adaptable batteries, to allow dial up or use a lower-power outlet depending on field size and needs.

Versatility to broadcast or repeat data through a range of power outputs.



Find out more at:  
[geospatial.trimble.com/tdl450b](https://geospatial.trimble.com/tdl450b)

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## UHF data radio

### CONNECTED FUNCTIONS

#### GENERAL

Communication	1 RS-232 port, 115.2 kbps maximum
User interface	5 navigation buttons with 128x64 graphical OLED display, four status LEDs. English language support
Bluetooth®	Server and client mode supported, Class 2

#### POWER

External	9 to 11 V DC , maximum 5 W output 11 to 30 V DC, fully functional with all supported output power levels	
During RX	Typically 2.0 to 2.7 W without output DC load Typically 58 to 59 W with max 4.0A output DC load	
During TX	No output DC load:  Typically 7 to 10 W, with 1 W output Typically 14 to 18 W, with 5 W output Typically 24 to 32 W, with 10 W output Typically 55 to 72 W, with 25 W output Typically 76 to 101 W, with 35 W output	Max 4.0 A output DC load:  Typically 63 to 66 W, with 1 W output Typically 70 to 75 W, with 5 W output Typically 82 to 89 W, with 10 W output Typically 113 to 130 W, with 25 W output Typically 133 to 163 W, with 35 W output
Output DC load	Typically 12.8 V, max 4.0 A (via 5-pin ODU data connector)	

#### MODEM SPECIFICATIONS

Link rate/modulation	4FSK: 19200 bps (25 kHz), 9600 bps (12.5 kHz) GMSK: 19200/16000/9600/4800 bps (25 kHz), 9600/8000/4800 bps (12.5 kHz)
Link protocols	TrimTalk v1, PCC EOT (FEC/no FEC, Scrambling/no Scrambling), PCC FST (FEC/no FEC, Scrambling/no Scrambling), PCC EOT4 (FEC/no FEC, Scrambling/no Scrambling), SATEL (FEC/no FEC, Whitening/no Whitening, CRC16/no EC)

#### RADIO SPECIFICATIONS

Frequency bands	403 MHz to 473 MHz (depending on the region, some channels are not allowed)
RF transmitter output	User selectable 1 W, 5 W, 10 W, 25 W and 35 W (where permitted)
Sensitivity	Typically -120 dBm to -110 dBm (BER 10 <sup>-2</sup> ) depending on used modulation and channel width
Type certification	TDL450B is type approved and certified for operation in the U.S., Canada, EU and UK, Australia and New Zealand

#### ENVIRONMENTAL SPECIFICATIONS

Enclosure	IP67 (Dustproof and watertight to depth of 1 m for 30 minutes) Corrosion resistance: According to MILSTD-810H: Method 509.7
Operating temperature	-20 °C to +55 °C: Functional (complies with standards) -30 °C to +65 °C: Functional
Storage temperature	-40 °C to +85 °C
Drop/vibration/shock	EN 60068-2-31:2008 / IEC 60068-2-64:2008 / EN 60068-2-27:2008

#### MECHANICAL SPECIFICATIONS

Dimensions	231.2 × 151.2 × 77.0 mm (L×W×H)
Weight	1.96 kg
Data/power connector	5-pin ODU/2-pin ODU
RF connector	50 Ohm, TNC female



Contact your local Trimble Authorised Distribution Partner for more information

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