

TRU35

ADVANCED & RUGGED EXTERNAL RADIO FOR A LONG-DISTANCE TRANSMISSION

The eSurvey TRU35 is a high-power, small-size, half-duplex digital radio model, which is designed using advanced 32-bit cortex M4 micro-controller technology, wireless transceiver RF technology, and digital communication technology. It uses high-quality RF components, excellent EMC and EMI processing.



Radio

Wireless Connection

Achieve connection with the receiver via cable or Bluetooth.

Thermal Protection

No longer worry about the effect of temperature on the power, for the TRU35 can adaptively adjust the transmit power, automatically reduce the power when the temperature is too high, and increase the intensity when temperature decreases to ensure the TRU35 is always in a stable power range and will not be damaged by overheating.

Convenient Configuration

Directly configure the TRU35 by SurPad software, independently developed by eSurvey GNSS, via Bluetooth, including its mode, protocol, baud rate in the air, frequency, and power level.

Standing Wave Detection Protection

No longer worry about damages caused by a long-time open circuit or short circuit.

Over Voltage Protection

With the two-stage surge protection, no longer a need to worry about damage to the TRU35 when the input voltage or current exceeds the normal range of positive and negative stages are reversed.

Long Transmission Distance

The transmission distance can reach up to 14 km with high power operating under optimal conditions.



Website



Social media

Product Specification

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General		
Frequency range		410-470 MHz
Operating mode		Half-duplex
Channel spacing		12.5 KHz / 25 KHz
Modulation		GMSK / 4FSK
Operating voltage		10.8 - 15 V
Power consumption (typical)	Transmit (high power)	97 W @13.5 V
	Receive	6.5 W
RF power stability		-1.0 - +1.0 ppm
Dimension		165 mm×125 mm×81 mm
Weight		1680 g
Operating temperature		-40°C - +85°C
Storage temperature		-45°C - +90°C
Antenna interface		TNC
Antenna interface impedance		50 ohm
Data interface		LEMO 5-pin
Transmitter		
RF output power		10 W / 30 W (13.5 V Input)
RF power stability		±1.5 dB
Adjacent channel inhibition		>50 dB
Receiver		
Sensitivity		< -116 dBm @BER 10 ⁻⁵ , 9600 bps
Co-channel inhibition		> -12 dB
Block		>70 dB
Adjacent channel selectivity		>52 dB @25 KHz
Perturbation resistance stray		>55 dB
Modulator		
Air rate		9600 bps, 19200 bps
Modulation		GMSK / 4FSK