



TRU35

Wireless Data Transceiver

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

All in one

Integrated with transmitting and receiving functions.

Radio Relay

Increase the transmitting distance by receiving data and transmitting out using different frequency.

Power Protection

Two-stage surge protection is used to protect the radio from damage when the input voltage or current exceeds the normal range or positive and negative stages are reversed.

Good Heat Dissipation

One-piece molded case makes it easy to perform good heat dissipation.

Thermal Protection

TRU35 can adjust the transmit power adaptively, automatically reduce the power when temperature is too high, and increase the power when temperature decreases. Ensure radio equipment is always in a stable power range and will not be damaged by overheating.

IP67 Protection

Bluetooth Function

Bluetooth can be used to configurate operating mode, protocol, frequency, power level as well as receiving data and transmitting out using radio.

Long Transmission Distance

Transmission distance can reach 14Km with high power level (Optimal conditions)

Product Specification

General Specifications		Transmitter Specifications		
Frequency Range	410~470MHz	RF Output Power High	High Power: 44.7dBm@DC 12.5V (30W)	
Operating Mode	Half-duplex	Low	Low Power: 40dBm@DC 12.5V (10W)	
Channel Spacing	12.5KHz/ 25KHz	RF Power Stability	±1.5dB	
Channels	16	Adjacent Channel Inhibition	>50dB	
Modulation	GMSK/ 4FSK	Receiver Specifications		
Operating Voltage	Rated voltage 12.5V (10.8~15V)	Sensitivity Better than -116dBm@BER 10-5, 9600bps		
Power Consumption	Transmit (High Power): 91W@DC 12.5V	Co-channel Inhibition	>-12dB	
(Typical)	Transmit (Low Power): 50W@DC 12.5V	Block	>70dB	
	Receive: 6.5W@DC 12.5V	Adjacent Channel Selectivity	>52dB@25KHz	
	Standby: 1.5W@DC 12.5V	Perturbation Resistance Stra	ay >55dB	
RF Power Stability	≤±1.0ppm	Modulator		
Dimension	165×125×81mm	Air Rate	9600bps, 19200bps	
Weight	1680g	Modulation	GMSK/ 4FSK	
Operating Temperature	-40~+85°C			
Storage Temperature	-45~+90°C			
IP Rate	IP67			
Antenna Interface	TNC, female			
Antenna Interface Impedance 50ohm				
Data Interface	LEMO 5pin			