



# 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 Power: 44.7dBm@DC 12.5V (30W) Low Power: 40dBm@DC 12.5V (10W)
Operating Mode	Half-duplex	RF Power Stability	±1.5dB
Channel Spacing	12.5KHz/ 25KHz	Adjacent Channel Inhibition	>50dB
Channels	16	Receiver Specifications	
Modulation	GMSK/ 4FSK	Sensitivity	Better than -116dBm@BER 10-5, 9600bps
Operating Voltage	Rated voltage 12.5V (10.8~15V)	Co-channel Inhibition	>-12dB
Power Consumption	Transmit (High Power): 91W@DC 12.5V (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 Stray	>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		

