

RF Modem II

User Guide





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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference,
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Warnings:

This equipment has been approved for mobile applications where the equipment should be used at distances greater than 20cm from the human body (with the exception of hands, wrists, feet and ankles). Operation at distances less than 20 cm is strictly prohibited.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Safety Instructions

- 1) This device may be used only as a part of RF Receiving Station.
- 2) Communicate this device accordingly with the communication chart below using only original communication cable. Communication in any other ways is strictly forbidden.
- 3) Power (8-20VDC) should be supplied only by approved power supply complying with limited power source requirements of EN60950-1.
- 4) This device should be used at distances greater than 20cm from the human body.
- 5) Don't touch the device RF antenna to any other subject when being in use.
- 6) Don't use the device in water and dust environment.
- 7) Avoid blows, drops and mechanical shocks.

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Specification

RF Specification:

- | | | |
|-------------------------------------|-----------------|-------------------------------|
| • RF Transmitter/Receiver Frequency | 433.92 MHz | |
| • Frequency separation | 9.9kHz | |
| • Data Rate | 4.8kBaud | |
| • Data Format | NRZ | (Non-Return-to-Zero) |
| • RF Output Power | -25dBm | |
| • Channel Spacing | 25kHz | |
| • Modulation | FSK | (Frequency-Shift-
-Keying) |
| • RSSI | -146dBm | |
| • Outdoor Transmit/Receive Range | Up to 1000 feet | |

RF-Antenna type used with RF-Modem connected to:

- | | | |
|------------------------------|---|-------------------------------|
| • RF-Receiving Station on PC | Indoor/ Strait-Right Angle
TLB-433-JW-5L | Gain 2.15dB,
Without cable |
|------------------------------|---|-------------------------------|

Specification

Power Supply

- Power Supply 8-20VDC
- Power Current 100mA max
- Protect inverted power supply

Interface Connection:

- RS232 Communication

Indication:

- Transmit /Tx RED LED
- Receive /Rx GREEN LED

Physical Specifications

- | | | |
|----------------|---------------|-----------------|
| • Construction | Metal Case | Black |
| • Dimensions | 200x110x100mm | With RF-Antenna |
| • Weight | 100g | With RF-Antenna |

Environment Condition

- Operation Temperature -20 To +55C
- Storage Temperature -40 To +85C

General description

The RF-Modem II is a low-cost wireless modem that operates in the license-free 433.92 MHz ISM frequency band range. The RF-Modem II transfers data up to 1,000 feet. Its small size and other unique features, such as low power consumption, make RF-Modem II the ideal as high performance RF data transceiver.

RF-Modem II can be connected and fully operated from the PC by means of RF Receiving Station.

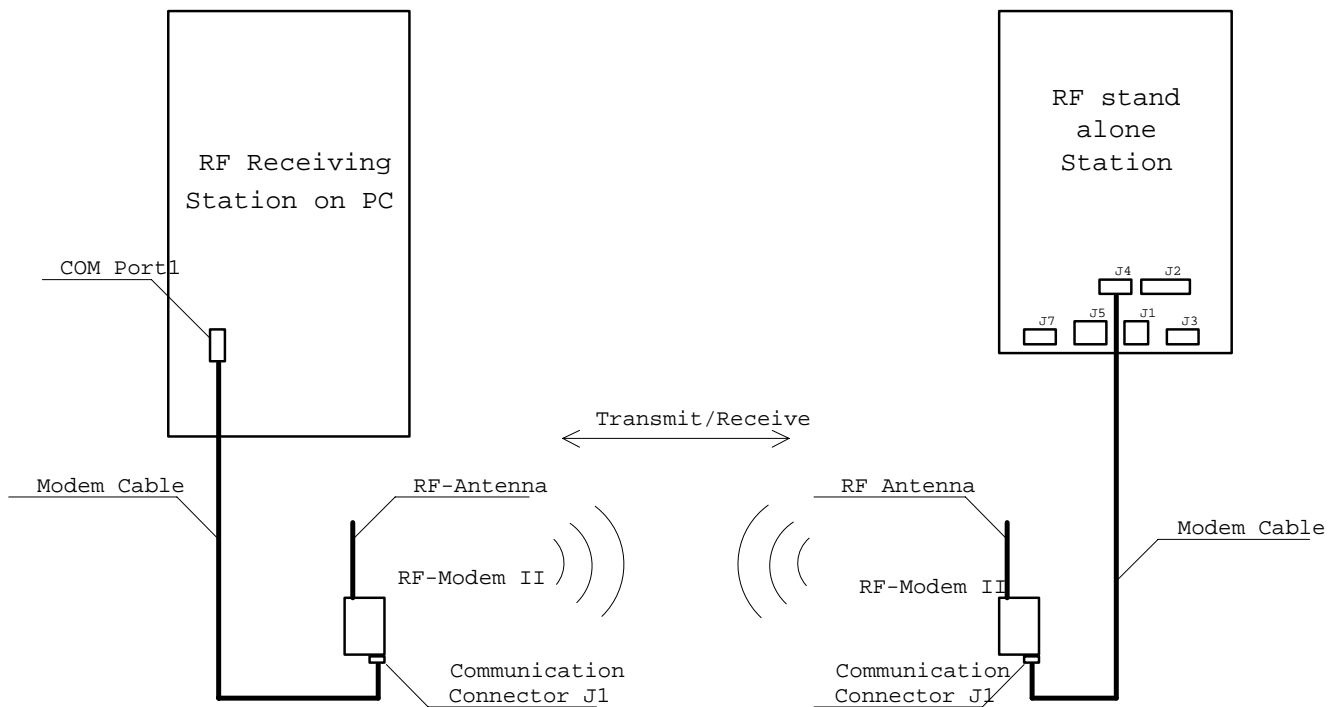
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Connections pin out

RF-Modem II Communication Connector J1 MicroFit 2*3 Pins Male			
Name	Pin	Description	Note
TxD_MODEM	1	Data Output	RS232
RxD_MODEM	2	Data Input	RS232
GND	3	Ground	GND
RF_REQ	4	Logic Output	Open Collector
Main_12V	5	Main Power	Power
N/C	6		

RF-Modem II RF-Antenna Connector J3 SMA Female			
Name	Pin	Description	Note
RF Data	1	RF Output/Input	433.92MHz
GND	2/3/4/5	Ground	GND

Communication Chart



Transmitting unit connection Set

