RFM200U™

UHF Radio Transceiver

Installation Manual

KP ELECTRONIC SYSTEMS LTD

Web Site: www.kpsystems.com

ISRAEL Office
Email: info@kpsystems.com
Tefen Industrial Park, Tefen 24959
Tel: 972-4-987-3066 Fax: 972-4-987-3692

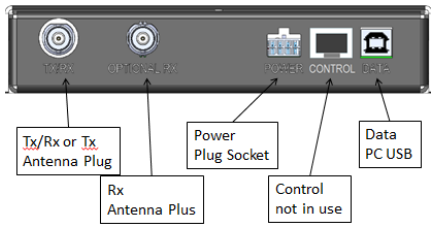
USA Office:
KP ELECTRONICS INC.
Email: ***info@kpsystems.com***
415 Sargon way Suite F Horsham PA 19044
Tel: (215) 442-7460 Fax: (215) 442-7461

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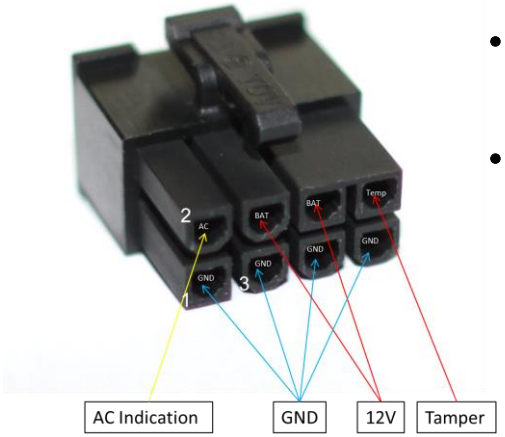
RFM200U™ General Description

The RFM200U is used as RF modem which holds the RF communication between he RMR and the metering devices. The interface with the PC is done through USB Type B for data exchange and Mini Type B for parameter setting. The RFMU radio is high power 5W UHF radio covers the 430 to 471MHz RF band. The RFM200U is power from 12.5V power supply that is backed up with Lid Accid 12V battery.

- **Connectors**



- **Power Connector**.



- **Data Connector**

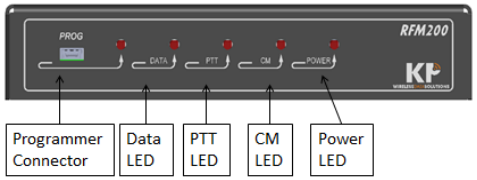
USB Type B used as data link between the RFM200U™ and the PC.

- **Antenna Tx/Rx and Tx**

BNC connector. It is used as Tx/Rx (2 ways) antenna connection or just Tx antenna connection if the second Rx connecter is in used i.e. by special jumper in the board.

- **Antenna Rx**

BNC connector. It is used for Rx antenna connection in case the other connecter is just for Tx. Sets by special jumper in the board.



- **Programmer Connector**

Mini USB type B connector. This connector is used to connect a special PC application ("GUP") to set or read parameters as Tx and Rx frequencies.

- **Data LED**

Whenever there is data on the USB cable then the LED is flickering.

- **PTT LED**

Whenever the radio is on transmission this LED is on.

- **CM LED**

Whenever the RFM200U™ senses any RF signal above -107dBm then this LED is on.

- **Data LED**

Whenever the RFM200U™ is powered then the LED is on.

Preparing for Operation

The BSRU100N is not a standalone unit, this device always combined in to products like the RMR perform the following steps:

a. Connecting Assembly Cables

1. Connect one end of the coax cable to Rx/Tx BNC. In case the Tx and the Rx signals are separated then connect the second (Rx) cable to the Rx Coax.

2. Connect the DC plug to the Power Plug Socket.

4. Connect one end of the data cable to USB rear panel connector.

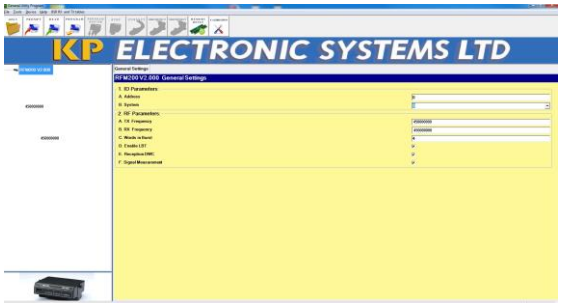
b. Setting Communication Parameters

Using KP's GUP5000™ Utility Program, the RFM200U™ parameter values listed below can be programmed or modified.

- Transmit frequency (MHz)
- Rx frequency (MHz)

Operating Instructions

- Connecting BSRU100N™ to GUP5000™ (utility program)
- Loading Parameter Values
- Changing Parameter Values
- Updating Parameter Value Changes
- Confirming Parameter Value Changes
- Activating Self Test



Technical Specification

General	
Band	UHF
Frequency Range	430-471 MHz
Channel Spacing	12.5 KHz
Programming	Fully PC programming
FCC rules and reg. under	Part 15.109 Subpart (B) radiated spurious emissions. Part 22,90,95
Operating Voltage	10-15 VDC
Diagnostics	Tx/Rx mod, Tx timer, power trouble, LD, Low Bat, Ovrl., CM, RSSI
Receiver	
Sensitivity analogy	-116dBm @ 12 dB SINAD
MDS sensitivity	-119dBm
Adj. Ch. Selectivity	60 dB for 12.5 KHz
Intermodulation response	>60dB
Spurious and image rejection	70dB
Transmitter	
Nominal output power	5w

RF EXPOSURE:
The antenna gain used with this transmitter should be 0 dBi or less and all persons should maintain a minimum safety separation distance of 35.64 cm