



# WI.232EUR-R™

## Embedded Wireless Module 868 MHz, 152.34 kbit/sec.

### DESCRIPTION

The Wi.232EUR-R™ module combines a state-of-the-art low power wireless transceiver with a powerful multipoint-to-multipoint protocol controller to form a transparent wireless communication solution capable of replacing wires in almost any RS-232/422/485 application. With a 120 dB link budget and very low power operation modes, the Wi.232EUR-R™ module is excellent for Automated Meter Reading (AMR), RFID, Industrial Controls, Wireless Sensing, and Wire Replacement applications with long range (<1,600ft. , line of sight) and long battery life.

The transceiver operates in two modes; narrowband and wideband. In narrowband mode, transmitter output power is +12 dBm and the maximum RF data is 38.4 kbit/sec. In wideband mode, the output power is +12 dBm and the maximum RF data rate is 76.8 kbit/sec.

The Wi.232EUR-R™ employs listen-before-talk (LBT) protocol and is designed to meet ETSI EN300-220-1 regulations for Europe operation.

### APPLICATIONS



Oil Sensing



Medical



(AMR) Automated  
Meter Reading



Industrial



Fleet Management

### ANTENNAS OPTIONS

ANT-868-02A (1/4 wave whip SMA connector)

ANT-868-01A (Helical straight RPSMA connector)

### RELATED PRODUCTS

Wi.232EUR-EVM-R (Evaluation module)

### PLACING ORDERS

The part number is provided below to ensure ordering correctly. Pricing is available at qualified Radiotronics distributors. For more product lines and all distributor information contact Radiotronics sales at 405.794.7730, visit [www.radiotronics.com](http://www.radiotronics.com), or email [sales@radiotronics.com](mailto:sales@radiotronics.com).

### FEATURES

1. Digital Transmission System (DTS) protocol
2. True UART to Antenna solution
3. Pin compatible with FCC modules
4. 76.8 kbit./sec. max RF data rate
5. 115 dB link budget
6. Straight (ST) antenna connector
7. Size 1.5" x 1.25"
8. Listen-before-Talk (LBT)

### SPECIFICATIONS

1. Frequency Band: 868 to 870 MHz
2. Wideband Mode
  - a. 2 Channels
  - b. 47.3 kbps Max RF Data Rate (effective)\*
  - c. +12 dBm TX Power\*\*
  - d. -104 dBm Max RX Sensitivity\*\*\*
3. Narrowband Mode
  - a. 6 Channels
  - b. 23.65 kbps Max RF Data Rate (effective)\*
  - c. +12 dBm TX Power\*\*
  - d. -106 dBm Max RX Sensitivity\*\*\*
4. Power
  - a. VDD: 2.7 V to 3.6 V
  - b. TX IDD- Narrowband: 28 mA
  - c. TX IDD- Wideband: 57 mA @ +12 dBm
  - d. RX IDD: 20 mA\*\*
  - e. Sleep/ Standby: 35 µA/ 850 µA
5. Operating temperature:
  - 40 degrees C to 85 degrees C

\*Single packet with overhead

\*\*50 ohm load, VDD= 3.3 V

\*\*\*measured @ 2400 baud

◆max power allowed (ETSI regulations)

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