



Evaluation Wireless Module 868 MHz, 152.34 kbit/sec.

### DESCRIPTION

The Wi.232EUR-EVM<sup>™</sup> features the popular Wi.232EUR-R<sup>™</sup> embedded radio module in an evaluation design. It is pre-mounted on a small PCB with onboard antenna connector and power supply regulator.

The Wi.232EUR-R<sup>TM</sup> 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<sup>TM</sup> 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.



### **APPLICATIONS**

Automated Meter Reading (AMR) Oil and Gas detection sensing Robotic and Industrial Controls Cable replacement Medical

### **STANDARD EVALUATION ANTENNAS**

ANT-868-02A (1/4 wave whip SMA connector) ANT-868-01A (Helical straight RPSMA connector)

## **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"

### **SPECIFICATIONS**

2.

- 1. Frequency Band: 868 to 870 MHz
  - 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  $\mu$ A/ 850  $\mu$ A
- 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)

# **ORDERING INFORMATION**

Wi.232EUR-EVM Evaluation Module