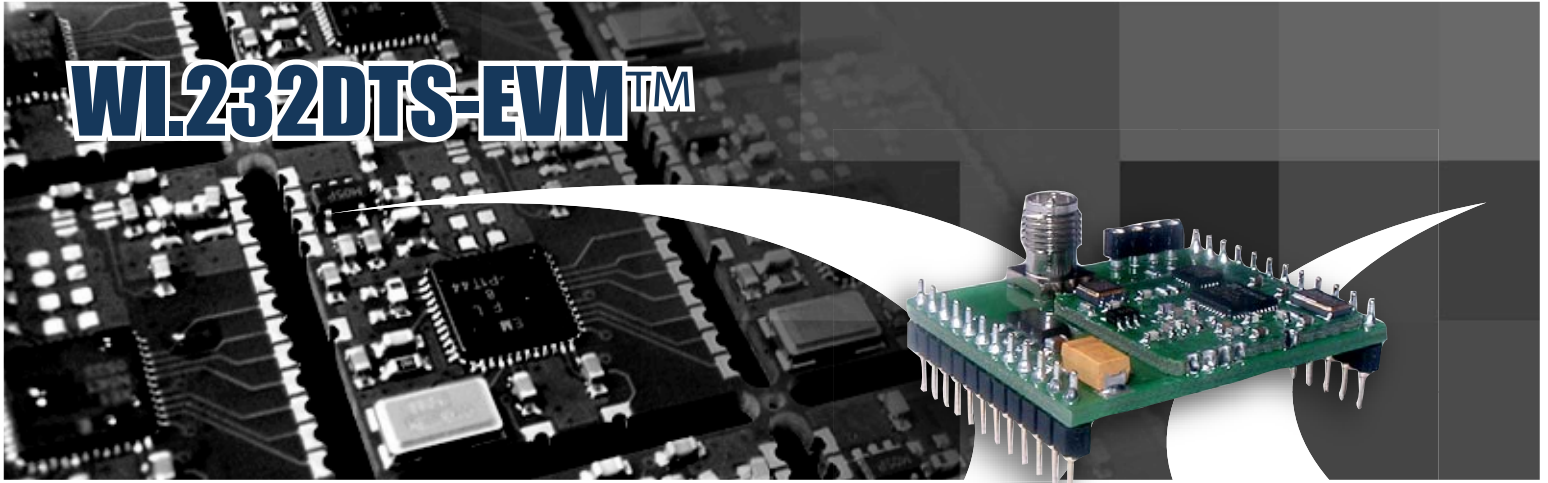


# Wi.232DTS-EVM™



## Evaluation Wireless Module 915 MHz, 152.34 kbit/sec.

### DESCRIPTION

The Wi.232DTS-EVM™ features the popular Wi.232DTS-R™ 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.232DTS-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 111 dB link budget and very low power operation modes, the Wi.232DTS-R™ module is excellent for Automated Meter Reading (AMR), RFID, Home Automation, and any other application requiring long range (<1,600ft., line of sight) and long battery life.

The transceiver operates in two modes; low power and DTS. In low-power mode, transmitter output power is 0 dBm and the maximum RF data is 76.8 kbit/sec. In DTS mode, the output power is +12 dBm and the maximum RF data rate is 152.34 kbit/sec.

Radiotronics offers a footprint compatible FCC modular approved module with certified FCC antennas. Radiotronics evaluation modules are pin compatible with other Radiotronics evaluation and FCC approved radios. The Wi.DTS-USB™ FCC approved base station is also available to interface with the Wi.232DTS-EVM™.



### APPLICATIONS

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

### STANDARD EVALUATION ANTENNAS

ANT-915-01A (Helical straight SMA connector)  
ANT-915-03A (1/4 wave whip SMA connector)  
ANT-915-05A (Helical right angle SMA connector)  
ANT-915-09A (1/2 wave dipole SMA connector)

### FCC CERTIFIED Wi.232DTS ACCESSORIES

Wi.232USB-DTS (Modular approved base station)  
Wi.232DTS-FCC-ST-R (FCC pin compatible module)  
Wi.232DTS-FCC-RA-R (FCC pin compatible module)

### FEATURES

1. Digital Transmission System (DTS) protocol
2. True UART to Antenna solution
3. Pin compatible with FCC modules
4. 152.34 kbit./sec. max RF data rate
5. 115 dB link budget
6. Straight (ST) antenna connector
7. Size 1.5" x 1.25"

### SPECIFICATIONS

1. Frequency Band: 902 to 928 MHz
2. DTS Mode
  - a. 32 Channels
  - b. 100 kbps Max RF Data Rate (effective)\*
  - c. +12 dBm TX Power\*\*
  - d. -104 dBm Max RX Sensitivity\*\*\*
3. LP Mode
  - a. 84 Channels
  - b. 19.2 kbps Max RF Data Rate (effective)\*
  - c. -3 dBm TX Power\*\*
  - d. -106 dBm Max RX Sensitivity\*\*\*
4. Power
  - a. VDD: 4 V to 12 V
  - b. TX IDD- LP Mode: 28 mA
  - c. TX IDD- DTS Mode: 57 mA @ +11 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

### ORDERING INFORMATION

Wi.232DTS-EVM	Evaluation Module
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