

# Life without Wires.

## Wi.232 Design Platform

The Wi.232™ North American Development Platform of embedded radio modules provides customers high performance radio solutions for simple serial wire replacement applications, such as most RS-232/422/485 applications. All radios are designed to meet FCC/IC certification standards.

### Radio + MCU + SW Protocol

The Wi.232DTS-R™, Wi.232FHSS-25-R™, Wi.232FHSS-250-R™ (902-928MHz), and the Wi.FS24-100ST™ (2.4GHz) modules are complete serial UART embedded solutions for fast implementation into any application. These modules work with any choice of customer host microcontroller. The Wi.232DTS-R uses a 32 channel single frequency protocol that is optimized to meet the Digital Transmission System (DTS) rules of the FCC. The higher output 25mW Wi.232FHSS-25-R™ and 250mW Wi.232FHSS-250-R™ uses frequency hopping spread spectrum. The Wi.FS24-100ST™ is a Zigbee-ready, 802.15.4 radio. Radiotronix also offers full FCC/CE certified radio modules of each of the above radios.

### Radio Only Drop-in Modules

The Wi.M 900X-R™ (902-928MHz) and Wi.M900T-R (902-928MHz) radio-only drop-in modules are footprint compatible design solutions with the Wi.232DTS-R™ and Wi.232FHSS-25-R™ or the Radiotronix line of 868MHz Wi.232™ radios. These modules have a simple interface to any microcontroller.

### Radio Only Drop-in Modules (SemTech Replacements)

The Wi.DPXXXX™ family of radio-only drop-in modules are direct replacements for all Semtech DP1203 and DP1205 family of embedded radio modules. These radios are offered in 433/868/915 MHz and feature the Semtech XE1203F and XE1205 transceiver ICs for high performance RF.

### Applications



Oil Sensing



Medical



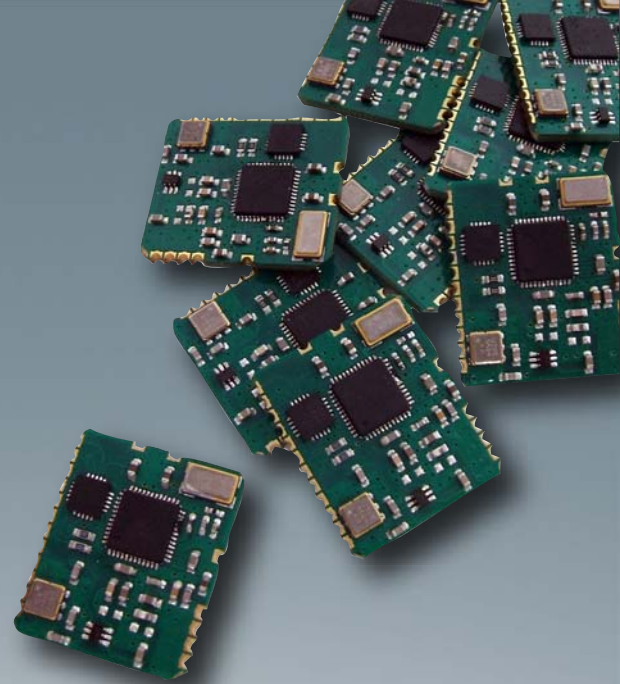
Automated Meter Reading (AMR)



Industrial



Fleet Management



### Features

#### Wi.232DTS-R Family

- 902-928MHz
- Meets DTS rules for Part 15; output power up to +13dBm
- PTP/MTP protocol
- Max RF data rate 152.24kb/s
- Small form factor 20x25mm

#### Wi.232FHSS-25/250 Family

- 902-928MHz
- FHSS Spread Spectrum modulation
- Max RF data rate 152.34kb/s
- Small form factors 20x25mm; 35 x35mm
- 250mW PA + RSSI (Wi.232FHSS-250-R)
- 25mW output power (Wi.232FHSS-25-R)
- 4 Adjustable Power steps
- Network addressing

#### Wi.FS24-100ST

- 2.4GHz
- 802.15.4 Zigbee Ready radio
- Max RF data rate 250kb/s
- Small form factors 25x45mm
- 10/100mW power output modes
- FCC/CE certified
- PTP/MTP/Mesh

#### Wi.M900T-R and Wi.M900X-R

- Transmitter only and Transceiver only versions
- Footprint compatible with Wi.232DTS/25 and 868MHz versions
- Max RF data rate 152.34kb/s
- Small form factor 20x25mm

#### Wi.DPXXX series

- 433/868/915MHz drop in radio modules
- Direct replacements for Semtech DP1205 and DP1203 modules
- Max RF data rate 152.34kb/s
- Small form factor 18x35mm

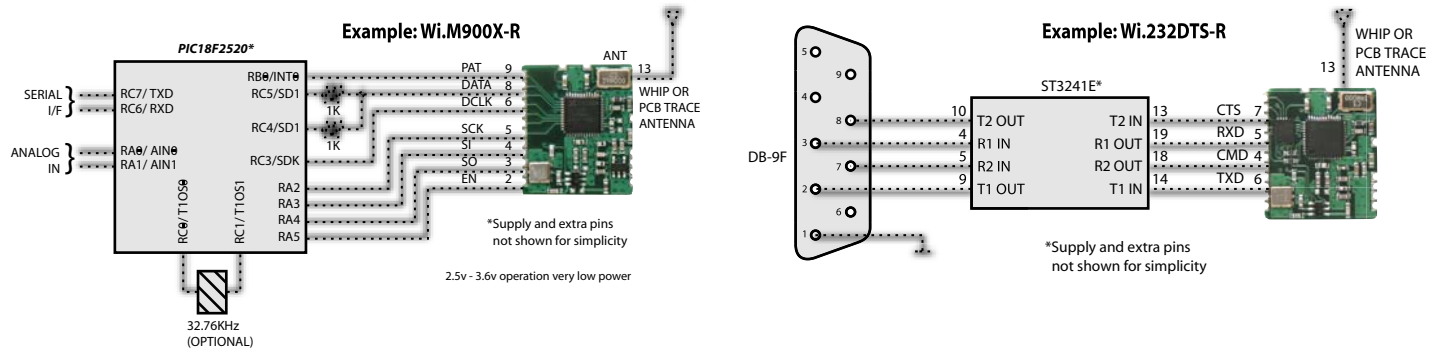


(P) 405.794.7730 - (F) 405.794.7747 - [www.radiotronix.com](http://www.radiotronix.com)

For 24 hour Sales and Tech. Support: [www.radiotronix.com/support/](http://www.radiotronix.com/support/)

# Wi.232 Design Platform

## Serial Connection



## Ordering Information

Part Number	Description	Frequency	Recommended Optional Antennas
<b>Radiotronics Base Module (DTS)</b>			
Wi.232DTS-R	Embedded Radio Module (controller + DTS protocol)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
Wi.M900X-R	Embedded Radio Module (controller + protocol)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
Wi.M900T-R	Embedded Radio Module (controller + protocol)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
Wi.232FHSS-25-R	Embedded Radio Module (controller + FHSS protocol)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
Wi.232FHSS-250-R	Embedded Radio Module (controller + FHSS protocol)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
<b>SemTech Drop-in Replacement Modules</b>			
Wi.DP1203-900-R	Embedded Drop-in Module (Direct replacement for SemTech DP1203C9153LF)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
Wi.DP1205-900-R	Embedded Drop-in Module (Direct replacement for SemTech DP1205C9153LF)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
<b>Radiotronics Drop-in Modules</b>			
Wi.M900X-DP-R	Embedded Drop-in Module (Direct replacement for SemTech DP1203C9153LF)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
<b>Evaluation Modules</b>			
Wi.232DTS-EVM-R	Evaluation Module (pinned straight SMA for development)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
Wi.M900X-EVM-R	Evaluation Module (pinned straight SMA for development)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
Wi.M900X-DP-EVM-R	Evaluation Module (pinned straight SMA for development)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
Wi.232FHSS-25-EVM-R	Evaluation Module (pinned straight SMA for development)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
Wi.232FHSS-250-EVM-R	Evaluation Module (pinned straight SMA for development)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
<b>FCC Certified Modules</b>			
Wi.232DTS-FCC-R	FCC Certified Module (pinned straight or right angle RPSMA)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
Wi.232FHSS-25-FCC-R	FCC Certified Module (pinned straight or right angle RPSMA)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
Wi.232FHSS-250-FCC-R	FCC Certified Module (pinned straight or right angle RPSMA)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
<b>Development Kits</b>			
RK-Wi.232DTS-FCC-R	Development Kit (includes 2ea. Wi.232DTS-FCC-R, 2 ANT-915-02A)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
RK-Wi.232FHSS-25-FCC-R	Development Kit (includes 2ea. Wi.232FHSS-25-FCC-ST-R, 2 ANT-915-02)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
RK-Wi.232FHSS-250-FCC-R	Development Kit (includes 2ea. Wi.232FHSS-250-FCC-ST-R, 2 ANT-915-02)	900MHz	ANT-915-02A/ ANT-915-04A/ ANT-915-06A/ ANT-915-07A
RK-Wi.M900X/T-R	Development Kit (includes 2ea. Wi.M900X/T-EVM-R, 2 ANT-915-02)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
RK-Wi.M900X-DP-R	Development Kit (includes 2ea. Wi.M900X-DP-EVM-R, 2 ANT-915-02)	900MHz	ANT-915-01A/ ANT-915-03A/ ANT-915-05A/ ANT-915-09A
RK-Wi.FS24-100ST	Development Kit (includes 2ea. Wi.FS24-100ST)	2.4GHz	Inverted F Antenna

## 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).