Wireless Transceiver with RS-232 Interface

OMWT-XREC-SER-900

$382
Basic Unit

1 YEAR WARRANTY — MADE IN USA

- **Built-in 900 MHz Frequency Hopping Radio for Long-Range Wireless Interface**
- **Receives Data from OMWT-REP Wireless Repeater, Data Can be Displayed and Logged Using OMWT-SOFT Software**
- **Can Also be Used as a General Purpose Radio Modem in SCADA Applications**

The OMWT-XREC-SER Wireless Transceiver is a general purpose compact data transceiver perfect for those needing high performance and dependable operation. Its wireless modem transfers data at 9600 baud up to 1/4 mile in a city environment with 1/2 wave antenna or greater than 10 miles line-of-sight with a YAGI directional antenna.

It is ideally suited for applications in supervisory control and data acquisition (SCADA), remote meter reading, home automation, security, instrument monitoring, point of sale systems (POS) and myriad other applications.

Transceiver modules have built-in support for multi-drop networking protocols. Multiple independent networks can operate in the same vicinity by using distinct network identifiers.

The radios integrate quickly and seamlessly into any new or existing design. Simply output serial data from a micro-controller or RS-232 port into the radio to send FCC approved, frequency hopping spread spectrum data through the air and capture it on all receivers within range on the same network. The system behaves as a virtual half-duplex parallel-wired network. The OMWT-XREC-SER-900 wireless transmitter is supplied standard with a 1/2 wave monopole antenna. For longer distance outdoor use, optional Omni-Directional and YAGI directional line-of-site antennas are available.

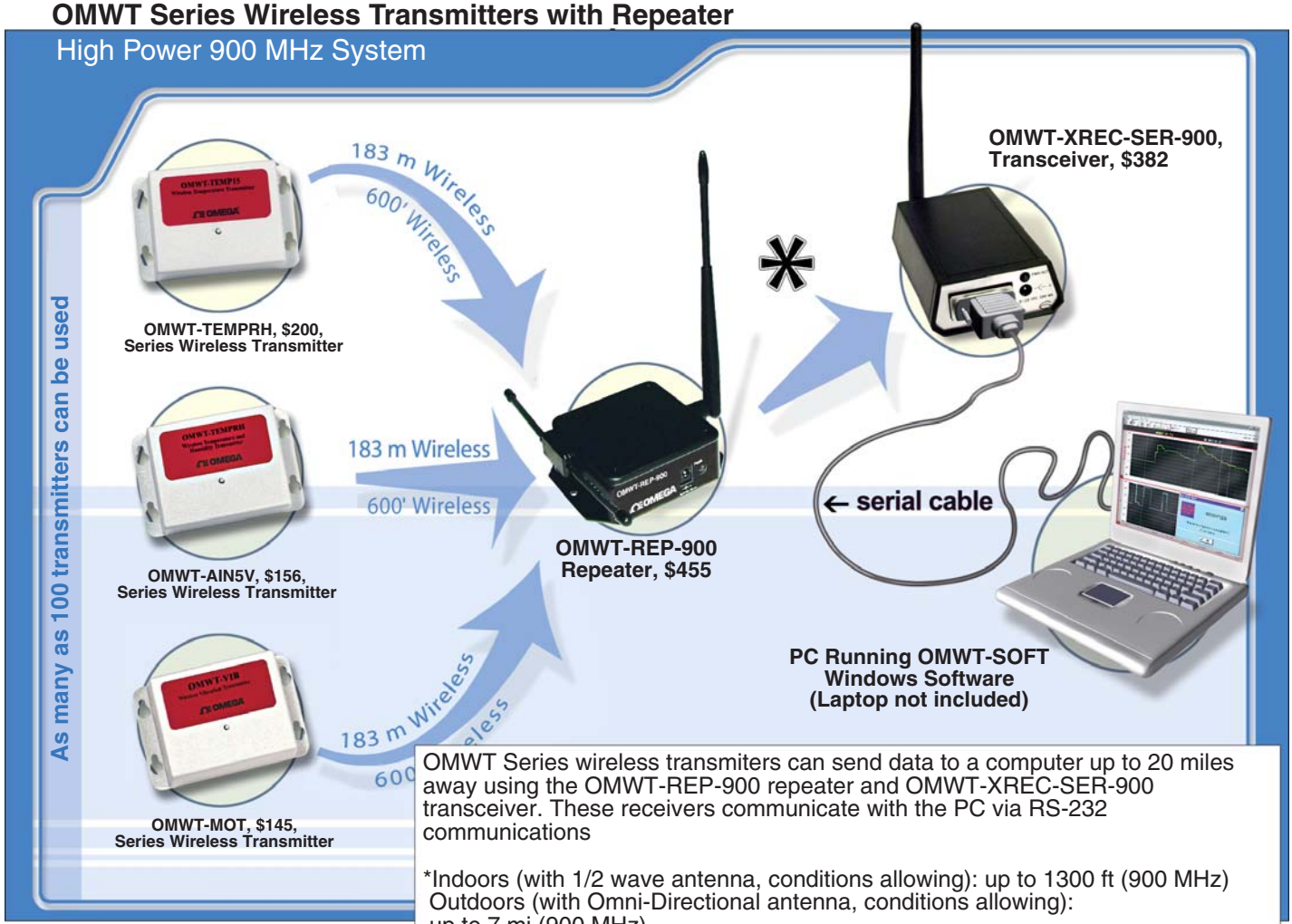
Specifications

Frequency Range: 900 MHz unlicensed ISM band
Type: frequency hopping spread spectrum transceiver
Frequency Control: Direct FM
Transport Protocol: Various monitoring and addressing modes
Channel Capacity: Hops through 25 channels, 7 different hop sequences and 65,000 network identifiers
Serial Data Interface: Asynchronous CMOS (TTL) signals, 5 V levels
Serial Interface Baud Rate (from serial port on transceiver to host computer): Configurable from 2400 to 57600 baud
Data Throughput (radio to radio): 9600 baud
Network Topology: Point–multipoint, point-to-point multi-drop via transparent networking
Channel Data Rate: 10K bps at 9600 baud (the half-duplex transmission of the OMWT-XREC-SER can sustain a continuous data stream at 9600 baud data rate)
Transmit Power Output: 100 mW
Rx Sensitivity: -110 dBm

OMWT-XREC-SER-900, $382, shown smaller than actual size

Transceiver Range Indoor (with standard 1/2 wave monopole antenna): 180 to 396 m (600 to 1300'), 900 MHz
Transceiver Range Outdoor (with optional Omni-Directional Antenna): Up to 7 mi (11 km), 900 MHz
Transceiver Range Outdoor (with optional YAGI antenna): Up to 20 mi (32 km), 900 MHz
Interface Rejection: 70 dB at pager and cellular phone frequencies
Power: 6 to 24 Vdc, 200 mA
Operating Temperature: 0 to 70°C (32 to 158°F)
Storage Temperature: 0 to 70°C (32 to 158°F)
Humidity: 10 to 90% RH non-condensing
Dimensions (without antenna): 70 H x 127 W x 35 mm D (2.75 x 5.00 x 1.375")
Weight: 142 g (5 oz)

OMWT Series Wireless Transmitters with Repeater



OMWT Series wireless transmiters can send data to a computer up to 20 miles away using the OMWT-REP-900 repeater and OMWT-XREC-SER-900 transceiver. These receivers communicate with the PC via RS-232 communications

*Indoors (with 1/2 wave antenna, conditions allowing): up to 1300 ft (900 MHz)
Outdoors (with Omni-Directional antenna, conditions allowing):
up to 7 mi (900 MHz)
Outdoors (with YAGI antenna, conditions allowing): up to 20 mi (900 MHz)

AVAILABLE FOR FAST DELIVERY!

To Order *(Specify Model Number)*		
Model No.	**Price**	**Description**
OMWT-XREC-SER-900	**$382**	900 MHz wireless transceiver with RS-232 interface
OMWT-OMNI-900-20	**330**	900 MHz Omni-Directional antenna with 6.1 m (20') cable*
OMWT-YAGI-900-20	**330**	900 MHz YAGI antenna with 6.1 m (20') cable*
OMWT-SOFT	**100**	OMWT Series Windows software

Each wireless transceiver includes 1/2 wave antenna, 110 Vac adaptor and complete operator's manual.
** Additional antennas are available. Contact the Data Acquisition Engineering Department.*
Ordering Example: OMWT-XREC-SER-900** wireless repeater with 900 MHz wireless transceiver and **OMWT-SOFT** Windows software, **$382 + 100 = $482.

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