

ACCES I/O PRODUCTS, INC. 10623 Roselle St.,San Diego, CA 92121-1506 Tel: <u>858-550-9559 FAX: 858-550-7322 10/29/02</u>

# Data Sheet Wireless Modem Radio Transceivers

#### FEATURES

- ★ Wireless serial data transfer to any equipment with a serial port
- ★ Seamlessly & transparently integrate ACCES Wireless Modem into existing interfaces
- ★ RS-232, or RS-422/485 Interface options on the Base Station Assembly
- ★ Distances up to 7 miles with the standard Dipole antenna

#### DESCRIPTION

The Wireless Modem unit can provide a radio communication link between any two pieces of equipment via serial port. These units can be configured in a number of ways including 900MHz or 2.4GHz modules as a stand base station or integrated into our REMOTE Data Acquisition Pods.

#### SPECIFICATIONS:

#### BASE STATION

External Power:	+5 VDC +/-5%
Alternate External Power:	+7 VDC to +18V
Baud Rate:	Selectable (see Radio Specifications)
Serial Data Format:	8 Character, No Parity, 1 Stop Bit 7 Character, Even Parity, 1 Stop Bit 7 Character, Odd Parity, 1 Stop Bit 7 Character, No Parity, 2 Stop Bits
Radio Data Buffers	132 Byte Data Input 132 Byte Data Output
Operating Temperature Range	-45 to +85 C
Storage Temperature Range	-50 to +120 C
Humidity	5% to 95% Non-condensing





## Data Acquisition via Radio

### RADIO SPECIFICATION

900MHz model	9600 bps throughput	19200 bps throughput
General		
Frequency range	902 to 928 MHz, Unlicensed ISM Band	
Туре	Frequency Hopping Spread Spectrum Transceiver	
Throughput	9600 bps	19200 bps
Performance		
Transmit output power	100mW	100mW
Rx Sensitivity	-110dBm	-107dBm
Range	Indoor: 600' to 1500' Outdoor: 7 mi. with dipole, over 20 mi with a high gain antenna	Indoor: 425' to 1060' Outdoor: 5 mi. with dipole, over 14 mi with a high gain antenna
Interference Rejection	70dB at Pager and Cellular Phone Frequencies	

2.4GHz model	9600 bps throughput	19200 bps throughput		
General				
Frequency range	2.40 to 2.4835 GHz, Unlicensed ISM Band			
Туре	Frequency Hopping Spread Spectrum Transceiver			
Performance				
Transmit output power	50mW	50mW		
Rx Sensitivity	-104dBm	-101dBm		
Range	Indoor: 150' to 375' Outdoor: 1.4 mi. with dipole, over 12 mi with a high gain antenna	Indoor: 106' to 265' Outdoor: 1 mi. with dipole, over 8.5 mi with a high gain antenna		
Interference Rejection	70dB at Pager and Cellular Phone Frequencies			

Ordering information: Call for pricing and availability

#### Part Number Structure

WM-XX-YY-ZZZ	
хх	09 = the 900MHz Module 24 = the 2.4GHz Module
YY	NA = no Antenna DP = Dipole Antenna
ZZZ	232 = RS232 serial protocol 485 = Field Selectable RS422 or RS485