



**WI-MOD-9-D**  
Radio 900MHz



**Technical Data**

**Power Supply**

Normal current drain  
Current when transmitting  
Low power mode current drain

10 - 30 VDC or 10 - 24 VAC  
70mA/12VDC or 50mA/24VDC  
350mA/12V or 250mA/ 24V  
20mA/12VDC or 15mA/24VDC

**Serial Port**

Standard data rates  
RS232 and RS485

1200 to 115200 baud.  
standard interface connections provided, each connected to the same serial port. Serial interfaces are asynchronous non-return-zero (NRZ) format

Characters supported  
RS232 Connection

7 or 8 data bits, even/odd/no parity, 1 or 2 stop bits  
provides full duplex operation as a DCE device with RTS/CTS hardware handshaking- standard D9 connector

RS485 connection  
Input and output buffers

provides half duplex operation for twisted pair multi-drop networks  
2Kbytes

**General Data**

Operating Temperature  
Humidity  
EMC Standards  
Approvals  
Mounting  
LED indication

-40 to 70°C (-40 to +158°F)  
0-99% non-condensing  
FCC Part 15 Class A and FCC Part 15.247  
Class 1, Div 2   
DIN rail mounting  
for unit OK, radio TX and RX, serial TX and RX, DCD (comms OK)

**Dimensions mm (in)**

115 x 165 x 32 (4.5 x 6.5 x 1.3)

**Radio Transceiver**

Frequency - USA/Canada  
Hop Sequence  
Transmit Power  
Expected line-of-sight range, depending on local conditions  
RF Data Transmission Rate  
Range may be extended by:

Frequency Hopping Spread Spectrum Transceiver  
902 - 928 MHz  
16 x 50  
1W  
USA/Canada 20+ miles  
19200 baud, 57600 baud, 115200 baud (selectable)  
up to five intermediate repeaters in controlled mode  
unlimited repeaters in transparent mode

Antenna connection

SMA female coaxial

**Data Transmission**

**Transparent mode:**

Data is transmitted with a system and group address.  
Data transmission begins as serial data is received—maximum packet size is 530 bytes. All modules with the correct system address, which receive the data packets, outputs the data—error checking is optional.

**Controlled mode:**

Data is transmitted in packets with a system address, source address, destination address, up to five intermediate repeater addresses, and a 16 bit CRC error-check. If the packet is received with a correct error check, only the destination module will output the data and will also return an ACK transmission. If the source module does not receive the ACK, it will retry a further four times. DCD provides communications status. Auto-connect and dial-up-control modes are available. CTS/RTS flow control provided based on input buffer availability.

**Configuration**

freeware software package or by Hayes AT commands

**Diagnostics**

Radio noise, signal strength and bit error rate (BER) diagnostics included. Radio signal strength value available on-line to host device.

**Ordering Data**

Type	Part No.
WI-MOD-9-D	6720005050