



WIRELESS MULTI-I/O MODULE WM5000-002



PRODUCT HIGHLIGHTS

- High Performance Wireless Connectivity
- Serial Interface: RS485 (Modbus Master Read/Write Function)
- 4x Analog Inputs (24-bit ADC)
 - 0-10 V or 4-20 mA Selectable Mode
 - Each Input Independently Selectable
- 4x Programmable Digital (Discrete) Channels
 - Supports Mix of Inputs and Outputs (Input, Counter, Output, or Pulse Output Option)
 - Configurable Debounce Filter
 - 30 VDC (Max) Input for All Channels
 - 1 A Sink Current for Open-Drain Outputs
- License-Free 900 MHz Band, Secure Data Transmission (2.4 GHz Optional)
- Wireless Range of Up to 64 km
- 9-30 VDC Power Input
- Easy-to-Install, Configure and Use / Scalable Solution
- Wirelessly Connects to a Wireless Gateway (Point-to-Point Only)
- User-Friendly BreeZ® Configuration Software

APPLICATIONS

- Oil & Gas, Pipeline, Petro-Chem, Water/Wastewater, Utilities, Irrigation Systems, Mining SCADA Systems, 3A Sanitary, Pharmaceuticals, Biotechnology, and Much More



Wirelessly Connects to Gateways	4 Analog Inputs + 4 Digital I/O	Modbus Master Function
902-928 MHz ISM License-Free Band	9-30 VDC Power Input	Easy-to-Configure BreeZ Software
Low Power Consumption	Low Profile Design w/DIN Rail Mount	Class I; Division 2

WIRELESS SENSOR NETWORK

- Reliable, Robust Wireless Performance
- Eliminates Costly Conduits and Wiring
- Monitor / Control Process Conditions 24/7
- License-Free ISM Band, FSK & FHSS Technologies
- Reduces Labour, Installation and Maintenance Costs
- Helps Meet Regulatory Requirements
- Industrial Strength Performance & Durability

INDUSTRIAL WIRELESS AUTOMATION

TECHNICAL SPECIFICATIONS





HARDWARE FEATURES

Device Functionality	Wireless Multiple Input / Output Module
Embedded Controller	32-bit Low Power ARM7 Microcontroller with Internal FLASH (Field Upgradeable)
Serial	RS485 Port - Modbus Master Only (RJ-45)
I/O Interfaces	4 Analog Inputs (24-bit ADC): 0-10 V or 4-20 mA Selectable Modes 4 Programmable Digital (Discrete) Channels - Supports Mix of Inputs and Outputs - 30 VDC (Max) Input for All Channels - 1A Sink Current for Open-Drain Outputs - Configurable Debounce Filter
Configuration	Cong/Debug Port - RS232 Slave Only (RJ-45)
Self-Diagnostics	Contains Comprehensive Self-Checking Software and Hardware for Continuous Monitoring of Operation

WIRELESS COMMUNICATIONS

Type:900MHz	ISM Band, FSK (Frequency-Shift Keying), FHSS (Frequency Hopping Spread Spectrum)
Frequency	902 MHz to 928 MHz
Data Rate	9600 bps / 115.2 kbps
Output Power	1mW to 1W
Receiving Sensitivity	-110 dBm @ 9600 bps or -100 dBm @ 115.2 kbps
Range	Up to 64km with Clear Line of Sight
Type: 2.4 GHz	2.4 GHz Optional Version Available, ISM, DSSS
Antenna Connector	MMCX

CERTIFICATIONS

FCC		FCC Part 15
Industry Canada (IC)		ICES-003
Safety		Class I; Division 2

MECHANICAL SPECIFICATIONS

Dimensions	124.5 mm (W) x 76.2 mm (H) x 35.6 mm (D)
Package Dimensions	203 mm (W) x 152 mm (H) x 63 mm (D)
Weight Net	0.3 kg; Packaging: 0.4 kg
Mounting Hardware	DIN Rail or Direct Mount / Custom Enclosures Available

ELECTRICAL SPECIFICATIONS

DC Power Input	30 VDC Maximum; 12 VDC Normal; 9 VDC Minimum
Average Power Input	2 Watt
Power Consumption	Idle: 100 mA; Conguration: 110 mA; Transmission: 350 mA

GENERAL SPECIFICATIONS

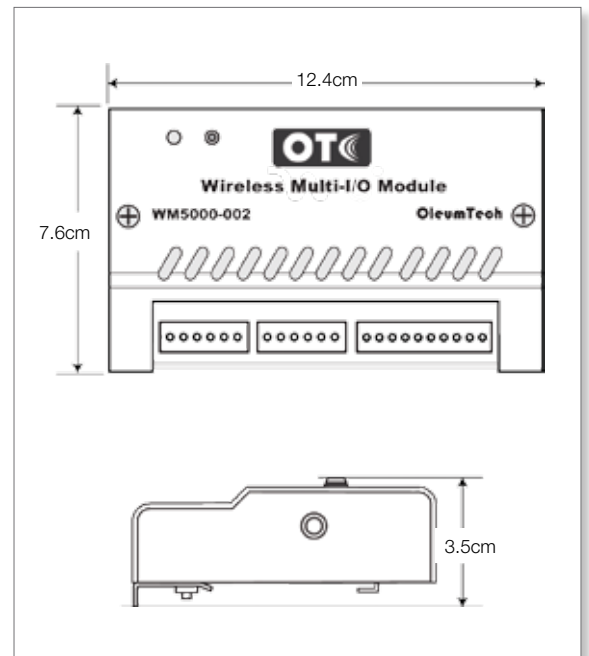
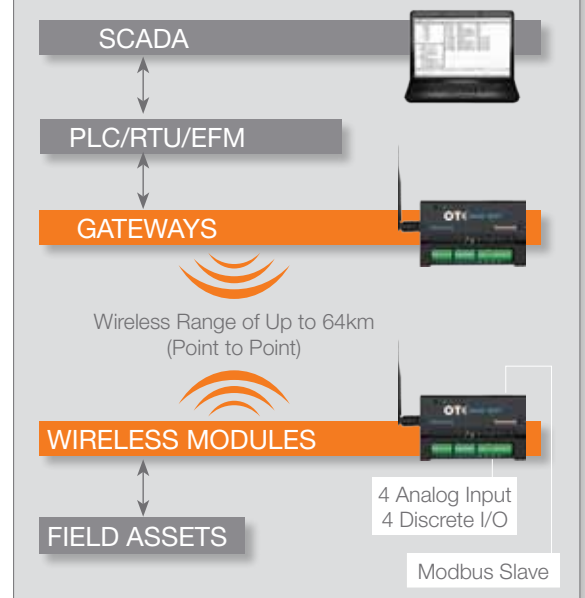
Operating Conditions	Temperature: -40 °C to 85 °C Humidity: 0 to 99 %, Non-Condensing
Warranty	2-Year Parts and Labour

ORDERING INFORMATION

Model Number(s)	900 MHz: WM5000-002
Wirelessly Connects to:	Gateways: Base Unit or DH2



WIRELESS MODULE BASIC NETWORKING DIAGRAM



WM5000-002

Automation Group

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