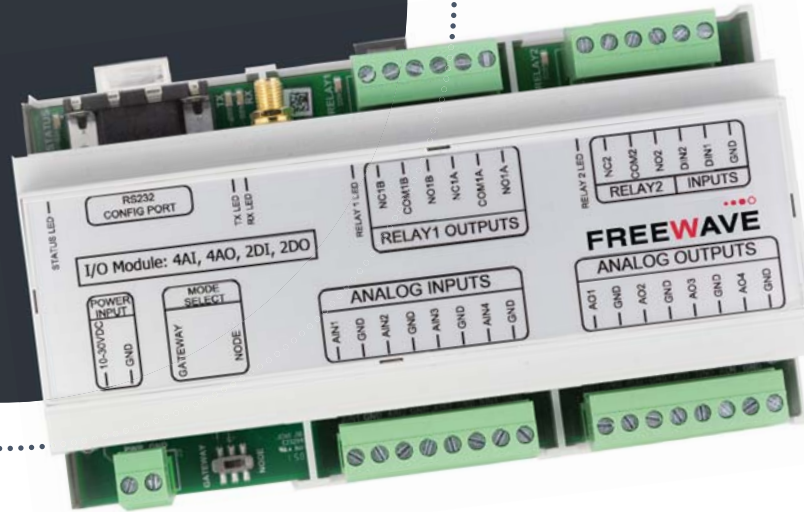# WIRELESS I/O MODULE
WC25i

FREEWAVE

KEY FEATURES

4 Analog Inputs (0-20mA or 0-5V)
4 Analog Outputs (0-20mA or 0-5V)
2 Digital Inputs
2 Relay Outputs (1 DPDT, 1 SPST)

Acts as a repeater for other WAVECONTACT wireless devices

Wide Range DC Power Input (10-30VDC)

Low Power Consumption

DIN Rail Mount with pluggable screw terminal blocks

Status LEDs

Safety: Class 1 Division 2

OVERVIEW

Rugged, Simple, Flexible, Value

The WC25i Wireless I/O Module integrates to analog and digital Inputs and outputs and relay outputs. The WC25i is used in wire replacement or standard endpoint modes. The modules are rugged, DIN rail mounted, and designed for ease of use.

Together with the WC45i Gateway, the WAVECONTACT system is quickly deployed to implement industrial automation where wired installations would be cost prohibitive.

Wire Replacement Mode
The wire replacement mode of operation acts as a wire replacement that replicates the analog and digital signals over a wireless link between the pair of Wireless I/O Modules. It is ideal for stand alone valve control or simple retrofit applications.

Standard Endpoint Mode
The WC25i operates as an endpoint in a WAVECONTACT system and sends the data (via the WAVECONTACT wireless mesh network) to a WC45i Gateway where the data is available via a Modbus RTU or Modbus-TCP interface. Supports Modbus writes to control the analog and relay outputs.

TECHNICAL SPECIFICATIONS

TRANSMITTER

Radio Frequency	902-928 MHz ISM band, FHSS radio, RP-SMA connector
Networks	Up to 65,520 separate networks
Range	Up to 3 miles line of sight (depending on antenna)
Analog Outputs	0-20 mA, 0-5 Volts
Relay Outputs	2A, 60W
Over the Air Rate	10kbps

RECEIVER

Digital Inputs	Dry contact or 30 volts max (push-pull)

POWER REQUIREMENTS

Power	10-30 VDC (25mA average @12V no relays energized, additional 15mA max for each energized relay, plus any analog output current)
Radio Power	300mW

GENERAL INFORMATION

Operating Temperature	-40ºC to 65ºC
Safety Rating	Class 1 Division 2 Certified, Groups C&D, Temperature Code T5. Certified to CSA C22.2 No. 213, Conforms to ISA 12.12.01
Weight	WL-W: 0.86 lbs WL-PM: 1.00 lbs

INFORMATION TO ORDER

Model Number	Description	Includes
WC25i-WL-W	Wireless IO system with 300 mW radio for use with a Whip Antenna (WC45-Whip).	WC25i-WL-W
WC25i-WL-PM	Wireless IO System with a Panel Mount Antenna (WC45-PM).	WC25i-WL-PM

Accessories

WC-USB-DB9: USB to Serial Interface Cable DB9
WC45-Whip: Whip Antenna for use in fiberglass or plastic enclosure with direct mount to a DIN mounted card.
WC45PM: Panel Mount Antenna to mount outside an enclosure.

Related Products

WC45i Gateway

SOLUTIONS

DRONES & ROBOTICS	EARTH MONITORING	GOV & DEFENSE	IRRIGATION & PRECISION AGRICULTURE	ASSET TRACKING	OIL & GAS	WATER & WASTEWATER	SMART CITIES	UTILITIES

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