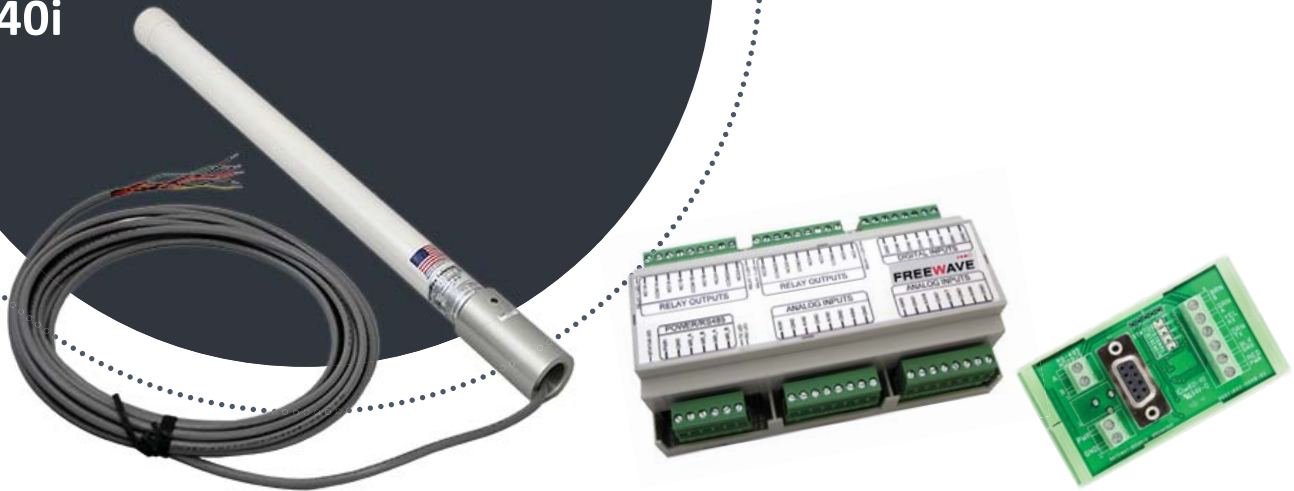


MODBUS WIRELESS I/O SYSTEM

WC40i



KEY FEATURES

Provides a wireless interface to remote Modbus devices

Messaging Forwarding Capability

Low power consumption

Integrated high-gain omnidirectional antenna and gateway electronics

Automatically configures as star or mesh network

Simple to install and maintain

Rugged design for demanding outdoor environments

Up to 3 miles range

¾" NPT conduit interface

Safety: Class 1 Division 2

OVERVIEW

Rugged, Simple, Flexible, Value

The WAVECONTACT Modbus I/O Wireless System provides a wireless interface to remote Modbus devices with a WC40i Modbus Endpoint at remote locations.

It automatically reads and transmits sensor registers at user-definable intervals, and writes Modbus registers. The WC40i Modbus Endpoint uses the same easy-to-use table driven configuration interface as the WC45i Gateway. Together with the WC45i Gateway, the WC40i system is quickly deployed to implement industrial automation where wired installations would be cost prohibitive.

The Modbus I/O System integrates with control modules to control sensor devices at the edge of a SCADA System.

Modbus I/O Endpoints

WC40i-MB: Modbus Endpoint (RS485) provides a wireless interface to remote Modbus devices.

WC40i-COUNT: Modbus Counter Endpoint, 2DI, provides a wireless interface for remote devices with pulse outputs such as flow meters. Calculates total counts, both instantaneous and frequency since last read, and state.

Interface and Control Modules

WC45i-BB: Smart Breakout Board used to configure and provide easy connection to WC40i Modbus Endpoints with RS485 interface.

WC40i-RSD: Modbus Stick with Remote Shutdown Module provides a fail safe RSD functionality at remote sites. The WC45i Gateway can run RSD logic controlling the shutdown functionality. A typical application is to shut off a well when one or more remote tanks are filled.

WC40i-MultiIO: Multi I/O module provides an I/O interface to 8 analog inputs, 6 digital inputs and two relays with direct and programmable pulse control.

TECHNICAL SPECIFICATIONS

TRANSMITTER

Frequency	902-928 MHz license-free ISM band compliant with FCC Part 15
Range	Up to 3 miles line of sight
Networks	Up to 65,520 separate networks
Over the Air Rate	10kbps

RECEIVER

Sensitivity	-105dB
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DATA TRANSMISSION

Data Update Rates	User configurable with configuration utility
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INTERFACES

Internal Diagnostics	Line voltage, signal strength, error conditions
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POWER REQUIREMENTS

Power	6-36 VDC
Radio Power	500mW
Current Draw	20mA at 12 VDC (Modbus Stick Only)

GENERAL INFORMATION

Operating Temperature	-40°C to 70°C
Humidity	0% to 100% condensing
Antenna Type	Omnidirectional
Antenna Gain	5 dB
Enclosure	Weather tight, integrated electronics and antenna
Safety Rating	Nonincendive, Class 1 Division 2 Groups C and D, T5

INFORMATION TO ORDER

Model Number	Description	Includes
WC40i-MB-485	Modbus Endpoint with smart breakout board	WC40i-MB, WC45i-BB
WC40i-MB-RSD	Modbus endpoint with RSD Module	WC40i-MB, WC40i-RSD
WC40i-MB-MultiIO	Modbus Endpoint with Multi I/O	WC40i-MB, WC45i-BB, WC40i-MultiIO
WC40i-COUNT-BB	Counter Endpoint with Breakout Board	WC40i-COUNT, WC45i-BB

Accessories

WC-USB-DB9: USB to Serial Interface Cable DB9

Related Products

WC45i Gateway

SOLUTIONS



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