NorthWrite
The Worksite Company

WM8000: Technical Specifications

Abstract

The WM8000 is a two-way wireless communications device that monitors low voltage digital and analog inputs. This product is used in conjunction with embedded software that transmits data wirelessly via the Reflex Telemetry Network in response to appropriately programmed events or actions. The NorthWrite WorkSite, a Web-based facility monitoring and management service, receives the data and displays it conveniently and concisely.

The WM8000 is configurable "over-the-air." Settings such as sampling intervals, alarm levels, and notifications are all made using your Internet browser and transmitted wirelessly to the device.

Product Highlights

- Effectively and reliably monitors and reports events or state changes.
- Uses the most robust wireless data network available (Reflex™ technology).
- Includes six input and two output channels.
- Does not require phone or LAN connections.
- Is fully FCC compliant.
- Can be AC or battery powered.

Product Applications

- electric, gas, and water metering
- power outage notification
- flow rates
- pressures
- liquid levels
- motion sensors
- fire alarms / smoke detectors
- water / humidity sensor alarms
- environmental monitoring
  - temperature
  - humidity

Hardware Features

- Motorola Reflex™ wireless data telemetry module with 2-watt radio frequency transmitter (FCC compliant)
- transmission frequency 901 to 940 MHz
- 32-bit RISC microprocessor provides reliable and responsive data processing
- OTA (over-the-air) programmable functionality reduces operating costs
- RS-232 / TTL communications port
- 2 configurable pulse-counting inputs
- 2 configurable event I/O ports
- 2 configurable analog inputs
- battery back-up available

Product Specifications:

Electrical Characteristics

Primary Input Voltage	85 to 270 VAC 60 Hz single phase
	6 to 24 VDC
Power Consumption	Less than one Watt

Environmental Specifications

Enclosure	Weather-resistant NEMA 4X
Dimensions	7.5” H X 6.25” W X 4” D
Weight	2.0 lbs.
Operating Temperature	-40C to +80C (-40F to +176F)
Operational Humidity	5% to 95% R.H. non-condensing @+60C

I/O Interface Specifications

Digital Inputs	Two (2) active high
DI Min Pulse Width	50 milliseconds
DI Min-Max Input Voltage	+2.5 VDC (min) to +40 VDC (max)
Pulse Inputs (PI)	Two (2) active high
PI I/O Max Frequency	200Hz
PI Min-Max Input Voltage	+2.5 VDC (min) to +40 VDC (max)

Analog Interface Specifications

Analog Inputs	Two (2)
Analog Input Types	Voltage, Current or RTD (independently configured)
DC Voltage Input Ranges…….	0-5 VDC, 0-10 VDC, 0-50 VDC, 0-100 VDC
RTD Input Types	100, 1K and 10K Ohm (platinum)
Current Inputs	4-20mA w/250 Ohm Load Resistors
Accuracy……..	±1% Full Scale

Output Specifications

Relay Outputs	Two (2) independent “Form C”
Maximum Relay Current	5A @ 24 VDC
Port Status LEDs……	Indicate Digital I/O Activity
Power, System, Transmit & Receive LEDs……	Indicate Device Power and Communications