DATASHEET

OTC

Highlights

- Provides 4 analog inputs (24-bit ADC)
- Designed for use with a DH1 Wireless Gateway
- Independently selectable input options for supporting 0-5 V, 0-10 V, or 4-20 mA signal
- RS485 Serial connectivity
- -40 ˚C to 80 ˚C (-40 °F to 176 °F)
- Class I, Division 2 (Zone 2) certified

C US II 1G

US Patent #6967589

OTC Transmitters OTC Gateway Network Infrastructure Cloud (Analytics)

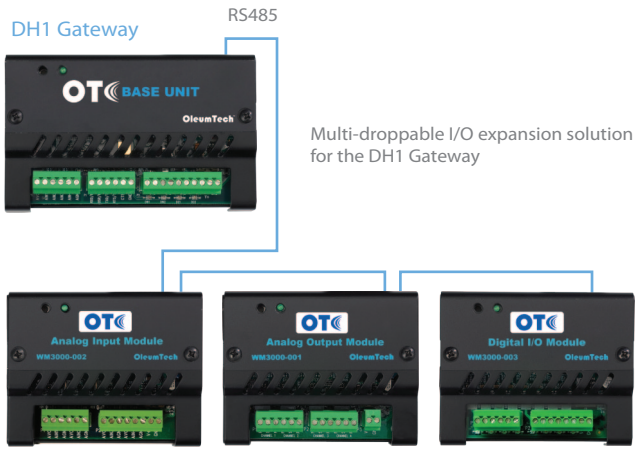
Analog Input Expansion Solution for the DH1 Gateway

4 High Resolution Analog Inputs

The OleumTech® OTC Analog Input Module is designed exclusively for use with a DH1 Wireless Gateway for integrating four additional high resolution analog inputs (24-bit ADC) via RS485 Serial connectivity. Each input can be independently selected for either 0-5 Vdc (default), 0-10 Vdc, or 4-20 mA mode of operation via jumper settings while the Slave ID and device parameters are programmed using the OleumTech BreeZ® Configuration Software.

Low-Power, Reliable

The Analog Input Module is certified for use in Class I, Division 2 (Zone 2) hazardous locations and accepts 9-24 Vdc external power. Its compact footprint easily fits inside a NEMA enclosure. The Analog Input Module is equipped with two RS485 Serial ports (RJ-45) for supporting multi-drop applications.

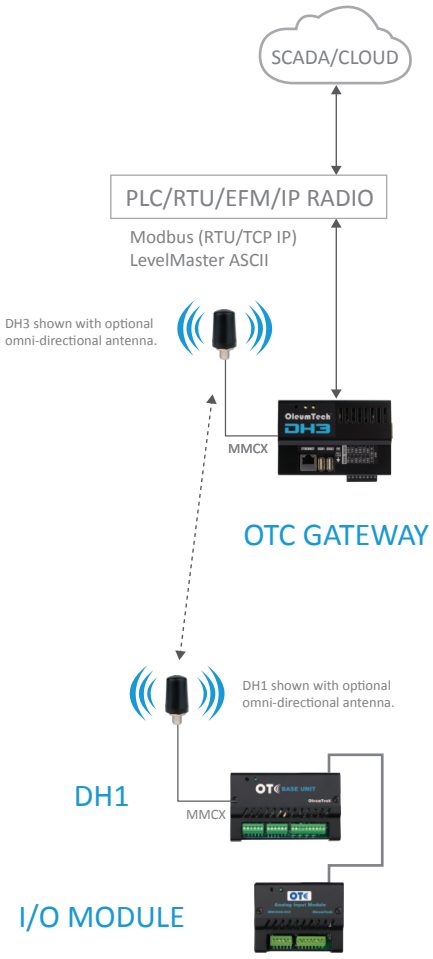


Analog Input Module

Technical Specifications

HARDWARE FEATURES	
Device Functionality	· Analog Input Expansion Module for DH1 Wireless Gateway
Device Interface	· RS485 (RJ-45 2-Wire), Modbus / RTU Protocol
I/O Interface	· 4 Analog Inputs
Resolution	· 24-bit ADC
Accuracy	· 0.1 % of Full Scale, 0.2% of Full Scale Over Temperature Range
Sensor/Receiver Voltage	· (2-Wire) 4-20 mA; (3-Wire) 0-5 V or 0-10 V (Jumper Selectable)
Input Impedance	· 250 ohm (4-20 mA), 40K ohm (0-5 V), 34K ohm (0-10 V)
RS485/Serial	· RS485 (2-Wire), 9,600/19,200 Baud, Modbus/RTU Protocol
Self-Diagnostics	· Contains Comprehensive Self-Checking Software and Hardware for Continuous Monitoring of Operation
CERTIFICATIONS & COMPLIANCE	
Over Voltage Rating	· Transient Voltage Suppressor on Each Port
Short Circuit Protection	· Fuse Protection (375 mA)
Safety	· Class I, Division 2, Groups A, B, C, D T4; Ex nA IIC T4 · Class I, Zone 2 AEx nA IIC T4 · ATEX: Sira 14ATEX4143X; Ex nA IIC T4 Gc · IECEx: SIR 13.0055X; Ex nA IIC T4 Gc
MECHANICAL SPECIFICATIONS	
Dimensions	· 3.8" (W) x 3" (H) x 1.4" (D) / 96.5 mm (W) x 76.2 mm (H) x 35.6 mm (D)
Package Dimensions	· 8" (W) x 6" (H) x 2.5" (D) / 203 mm (W) x 152 mm (H) x 63 mm (D)
Weight	· Net: 0.75 lbs / 0.3 kg; Gross: 1 lbs / 0.4 kg
Mounting	· DIN Rail Mountable with Height Adjustability
ELECTRICAL SPECIFICATIONS	
DC Power Input	· 9-24 Vdc
Power Consumption	· 60 mW @ 12 Vdc (Excludes External Sensors)
Wiring	· 18-24 AWG
GENERAL SPECIFICATIONS	
Operating Conditions	· Temperature: -40 °F to 176 °F (-40 °C to 80 °C) ATEX/IECEx: -40 °F to 176 °F (-40 °C to 80 °C) · Humidity: 0 to 99 %, Non-Condensing
Warranty	· 2-Year Parts and Labor
Country of Origin	· USA
ORDERING INFORMATION	
Model Number	· WM3000-002
Connects To	· DH1 Wireless Gateway and Expansion Modules
Configuration Cable	· SX1000-CC2, 20-ft All-in-One Configuration Cable

Networking Diagram



Typical installation of OleumTech expansion modules are mounted adjacent to the DH1 Base Unit on DIN rail in a NEMA 4 enclosure and connected with supplied inter-module connector cable. The I/O Expansion Modules are only compatible with the DH1 Gateway.

MADE IN USA