OleumTech™

ANALOG TRANSMITTER

SM5100-P0x

Made in USA

PRODUCT HIGHLIGHTS

- High Performance Wireless Connectivity
- Ideal for Wirelessly Monitoring Analog Devices
- 1, 2 or 4 Analog Input Option (0-5 Volt), 24-bit ADC
- Seamless Integration with Third-Party Analog Devices
- Direct or Pipe-Mounting Versions for Integration Flexibility
- License-Free 900 MHz/2.4 GHz Band, Secure Data Transmission
- Intrinsically Safe for Use in Hazardous Locations
- Self-Contained Battery Operation
- Easy-to-Install, Configure and Use
- Connects to Wireless Gateways
- 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

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 Labor, Installation and Maintenance Costs
- Helps Meet Regulatory Requirements
- Industrial Strength Performance & Durability

Wirelessly Monitor Analog Devices	Multi-Vendor Compatible	1, 2 or 4 Analog Input Option / 24-bit ADC
Direct or Pipe-Mount Version	3/4" NPT Connection	902-928 MHz ISM License-Free Band
Self-Contained Battery Operation	Up to 10-Year Battery Life	Class I; Division 1

INDUSTRIAL WIRELESS AUTOMATION

OT

HARDWARE FEATURES

Device Functionality	· Analog Input Monitor Wireless Transmitter
Embedded Controller	· Ultra-Low Power RISC Microcontroller with Internal FLASH (Field Upgradeable)
Device Interface	· Standard RS232 Serial
I/O Interface	· 1, 2 or 4 Analog Input Options (0-5 Volt), 24-bit ADC
Power Source	· Self-Contained, Internal 3.6 V Lithium Battery
Available Power	· Supplies Sensor Power Up to 9.5 V
Internal Battery Life	· Up to 10 Years, Based on Usage
Self-Diagnostics	· Contains Comprehensive Self-Checking Software and Hardware for Continuous Monitoring of Operation

WIRELESS COMMUNICATIONS

Type: 900 MHz	· ISM Band, FSK (Frequency-Shift Keying), FHSS (Frequency Hopping Spread Spectrum)
Frequency	· 902 to 928 MHz (North America); 915-928 MHz (Aus, Int'l)
Data Rate	· 9600 bps / 115.2 kbps
Output Power	· 1 mW or 10 mW
Receiving Sensitivity	· -110 dBm @ 9600 bps or -100 dBm @ 115.2 kbps
Range	· Up to 7500 Feet (2.3 km) with Clear Line of Sight

CERTIFICATIONS & COMPLIANCE

FCC	· FCC Part 15
Industry Canada (IC)	· ICES-003
Safety	· Class I Division 1, Groups A, B, C, D T3C
	· Class 1 Zone 0 AEx ia IIC T3 Ga; Class 1 Zone 0 Ex ia IIC T3 Ga
	· ATEX: Sira 13ATEX2142X; Ex ia IIC T3 Ga; II 1 G
	· IECEx: SIR 13.0054X; Ex ia IIC T3 Ga

MECHANICAL SPECIFICATIONS

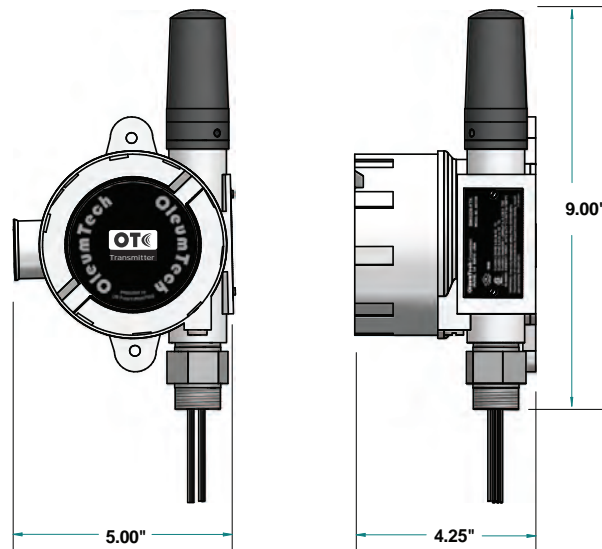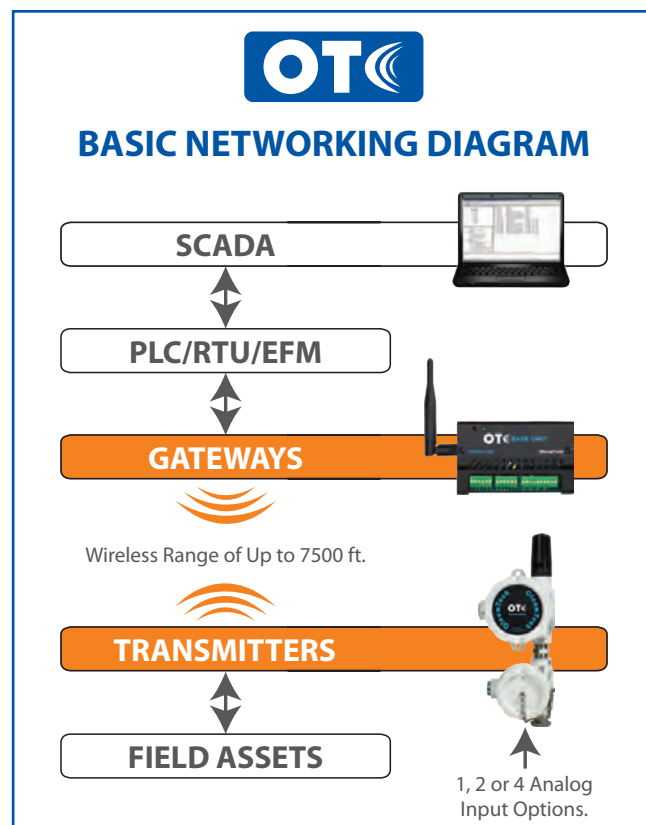|	
Dimensions	· 5" (W) x 9" (H) x 4.25" (D) / 127 mm (W) x 229 mm (H) x 108 mm (D)
Package Dimensions	· 10.25" (W) x 14" (H) x 6.5" (D) / 260 mm (W) x 356 mm (H) x 165 mm (D)
Weight	· Net: 2.75 lbs / 1.4 kg; Packaging: 4.75 lbs / 2.2 kg
Mounting Hardware	· Direct or Pipe Mount
Hardware Connection	· W/O Junction Box: 3/4" NPT Male; W/Junction Box: 3/4" NPT Female
Enclosure Casing Material	· Type 4x Aluminum; IP66

GENERAL SPECIFICATIONS

Operating Conditions	· Ambient Temperature (Class I; Division 1): -40 °F to 158 °F (-40 °C to 70 °C)
	· Ambient Temperature (ATEX, IECEx): -4 °F to 158 °F (-20 °C to 70 °C)
	· Ambient Temperature (Non-Hazardous Applications): -40 °F to 185 °F (-40 °C to 85 °C)
	· Humidity: 0 to 99 %, Non-Condensing
Warranty	· 2-Year Parts and Labor
Country of Origin	· Made in USA

ORDERING INFORMATION

Model Number(s)	· 900 MHz: SM5000-P01 (1 AI), SM5000-P02 (2 AI), SM5000-P04 (4 AI)
Wirelessly Connects To	· Gateways: Base Unit (WM2000-002) or DH2 (SR5000-DH2)

BASIC NETWORKING DIAGRAM

SCADA
PLC/RTU/EFM
GATEWAYS
Wireless Range of Up to 7500 ft.
TRANSMITTERS
FIELD ASSETS
1, 2 or 4 Analog Input Options.

9.00"
5.00"
4.25"

OleumTech™ Corporation

SM5000-P0x