



"Setting The Standard For Supplier Excellence"

SiloPatrol® Wireless Communication Interface

- ▼ Eliminates "Smart" Sensor Communication Wiring & Reduces Installation Costs
- ▼ Overcomes Physical Obstacles to Wiring
- ▼ High Reliability with Frequency-Hopping Spread-Spectrum Technology
- ▼ Superior 900MHz Band
- ▼ Affordable Technology & Design
- ▼ Single or Multiple Networks



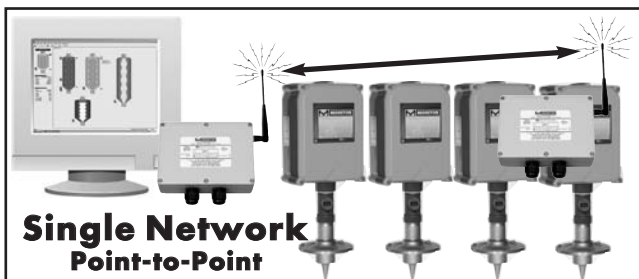


The **SiloPatrol**® inventory monitor "smart" sensors (Refer to Bulletin 343A) can be used in conjunction with the **SiloTrack**™ Inventory Management PC-Based Software (Refer to Bulletin 343B). Communication between the Model SMU "smart" sensors and the **SiloTrack** software is accomplished via 2-wire RS-485 communication format. The **SiloPatrol** Wireless Communication Interface can be used to replace the RS-485 wiring between the "smart" sensors and the PC. The **SiloPatrol** Wireless Communication Interface can be used to lower the cost of installation and to overcome obstacles that make hardwiring impractical or impossible.

The **SiloPatrol** Wireless Communication Interface uses proven frequency-hopping spread-spectrum technology, operating in the 900MHz band, to communicate between your PC running **SiloTrack** Server software and individual or groups of **SiloPatrol** "smart" sensors. The 900MHz band is a FCC license-free band and offers greater transmission distances, better signal transmission through obstructions and lower signal loss than other possible frequency bands.

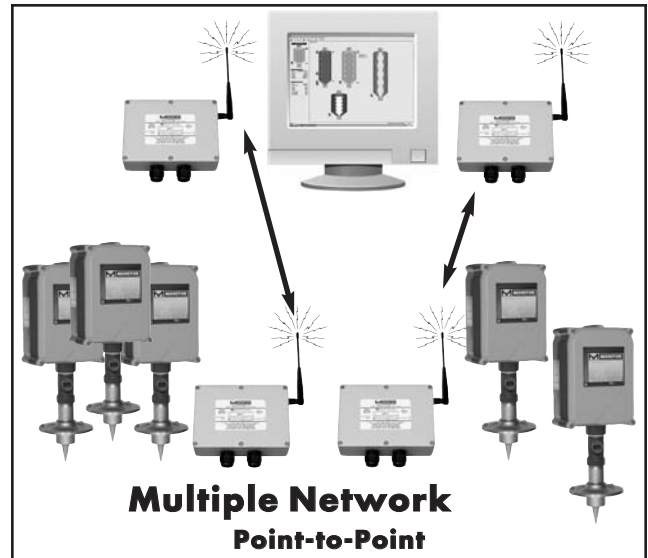
Frequency-hopping spread-spectrum radio technology utilizes a band of frequencies between 900-928MHz and continuously "hops" or switches frequencies during radio transmission enhancing reliability and minimizing disruption of the telecommunications. The spread-spectrum enables a signal to be transmitted across a frequency band that is much wider than the minimum bandwidth required by the information signal. This reduces interference and allows for increased data communication.

The **SiloPatrol** Wireless Communication Interface can be utilized in numerous applications, even with multiple sensor networks and over 100 sensors. Each sensor network will require a wireless transceiver at the PC. A wireless transceiver is also required at the sensor location. Up to 16 sensors can be connected with one wireless transceiver pair.



Single Network/Point-to-Point: One transceiver is located at the PC and one at a group of sensors or at a single sensor. If used with a grouping of sensors located in close proximity, the sensors would be wired together with the transceiver.

Single Network/Multiple-Point: One transceiver is located at the PC and one transceiver at each of multiple groups of sensors within a single network or one transceiver at each sensor.



Multiple Networks/Point-to-Point: One transceiver for each network of sensors at the PC and one transceiver at each network group of sensors.

Multiple Networks/Multiple-Point: One transceiver is located at the PC for each network and one transceiver at each of multiple groups of sensors within each network or one transceiver at each sensor within each network.

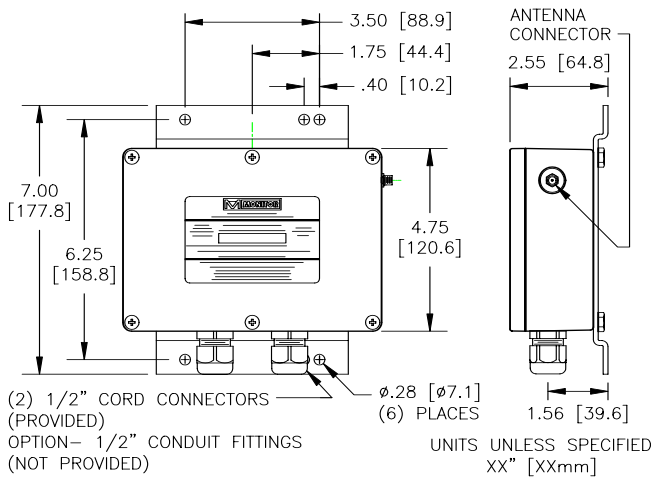
MODEL SELECTION

The **SiloPatrol**® Wireless Communication Interface is enclosed in a NEMA 4 enclosure and is provided with a mounting bracket that can be used for mounting on a flat surface or pipe/railing. Each transceiver includes both RS-485 and RS-232 interfaces. A choice of antenna is provided (standard or high gain) along with a choice of power supply options.

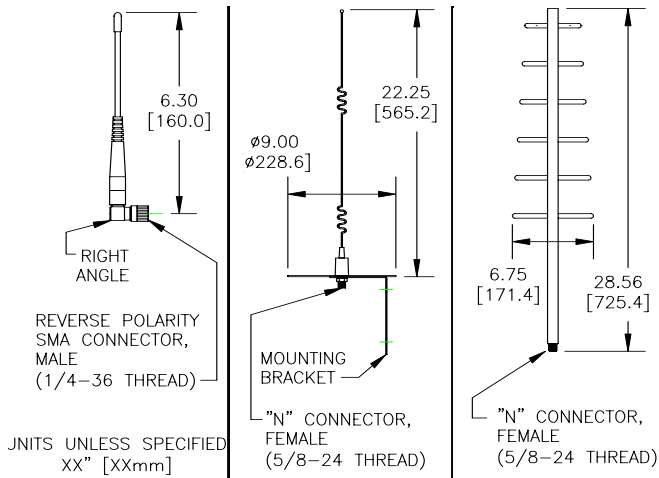


MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS



Wireless Communication Interface



Left: Standard Range Antenna Center: Extended Range Right: Yagi Antenna

ORDERING INFORMATION

6 - 84 X 0 - X

OPERATING BAND FREQUENCY

1 = 900MHz (North America)

OPERATING VOLTAGE

1 = 115/12 VAC

2 = 230/12 VAC

1 Antenna and interconnecting cable are sold separately.
(interconnecting cable is required for extended range and Yagi ONLY).

ANTENNA SELECTION

- 6-8071 Standard Range Antenna, 900MHz, 2.5db (mounts directly to Interface box)
- 6-8072 Extended Range Antenna, 900MHz, 7.2db (requires cable accessory)
- 6-8073 Yagi, Unidirectional Antenna, 900MHz, 9.0db (requires cable accessory)

ACCESSORIES

- 6-8082 Cable, 3ft length, for use with 7.2 db extended range and Yagi antenna
- 6-8083 Cable, 10ft. length, for use with 7.2db extended range and Yagi antenna

SPECIFICATIONS

Power Requirements: 115/12 VAC (±15%); 7VA; 50/60Hz
230/12 VAC (±15%); 7VA; 50/60Hz

Ambient Operating Temp: -40° to +150° F (-40° to +65° C)

Data Input Signal: RS-485 half-duplex, isolated, proprietary protocol

Alt. Data Input Signal: RS-232

Wiring Distance: 4,000 ft. (1,220 m)

Radio Output: 900MHz (North America); 100mw -110dBm

Radio Sensitivity: -110dBm

Conduit Entry: Two (2) 0.88in (22.4mm) dia. holes

Indicators: Red LEDs: Query, Reply and Error
Green LED: Power

Housing: Powder coated die cast aluminum, IP66 NEMA 4

Mounting: Desk, wall or pipe/rail

WARRANTY

Monitor Technologies LLC warrants each **SiloPatrol**® Wireless Interface it manufactures to be free from defects in material and workmanship under normal use and service for two (2) years from the date of purchase within North America, and one (1) year from the date of purchase outside of North America. The purchaser must notify Monitor of any defects within the warranty period, return the product intact, and prepay transportation charges. The obligation of Monitor Technologies LLC under this warranty is limited to repair or replacement at its factory. This warranty does not apply to any product which is repaired or altered outside of Monitor Technologies' factory, or which has been subject to misuse, negligence, accident, incorrect wiring by others, or improper installation. Monitor Technologies LLC reserves the right to change the design and/or specifications without prior notice.





44W320 Keslinger Road ▼ P.O. Box 8048 ▼ Elburn, IL 60119-8048 ▼ 800-766-6486 ▼ 630-365-9403 ▼ Fax 630-365-5646
www.flexar.info ▼ www.monitortech.com ▼ www.monitortech.typepad.com ▼ monitor@monitortech.com

