



Practical solutions... at every level!

# Wireless Communication Interface

## FEATURES & ADVANTAGES

- ▼ **Longer range** unlicensed 900MHZ band operation (North America).
- ▼ **High reliability** achieved with Frequency-Hopping Spread Spectrum Technology.
- ▼ **External antenna connector** allows for antenna variations when site specific details require it.
- ▼ **Additional transceivers** configured as slaves permits sensors not grouped together to be controlled by a single Master transceiver for up to 16 sensors per Master. Up to seven independent "Channel Groups" are switch selectable.
- ▼ **Internal status LEDs** simplify setup or troubleshooting by indicating when data is both received and transmitted.
- ▼ **Self test switch** activates a loop communication test eliminating the need for working operator interface on sensor.



### Practical Tip

A great accessory when your property is divided by a railroad track, river or stream and you don't have a right of way or the ability to hard wire over, under, around or through.

## PRINCIPLE OF OPERATION

Communication between the **SiloPatrol**® sensor (SMU ) "smart" sensors and an operator interface like the **HMI**<sup>2</sup> control console or the **SiloTrack**<sup>TM</sup> inventory management software is accomplished via 2-wire RS-485 communication format. The Wireless Communication Interface can be used to replace the RS-485 wiring between the "smart" sensors, the **HMI**<sup>2</sup> or the PC. The Wireless Communication Interface can be used to lower the cost of some installation and to overcome obstacles that make hardwiring impractical or impossible.

The Wireless Communication Interface uses proven frequency-hopping spread-spectrum technology, operating in the 900MHz band, to communicate between your operator interface and individual or groups of SMU ) "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 available higher frequency bands.

The Wireless Communication Interface has an ENCLOSURE TYPE 4 housing and is provided with a mounting bracket that can be used for affixing to a flat surface or pipe / railing. Each transceiver includes both RS-485 and RS-232 interfaces. The wireless communication interface is not compatible with Flexar<sup>®</sup> guided wave radar level sensors.

## PRACTICAL APPLICATIONS

- ▼ A practical alternative when hard-wiring is not possible (ex. to cross a river, to span a large facility, etc.).
- ▼ A cost-effective alternative to eliminate hard-wiring.
- ▼ For use when interconnection wiring distances will exceed the 4,000ft (1,220m) maximum wiring distance limitation.

## OPTIONS

- ▼ A selection of antennas including omnidirectional standard range, omnidirectional extended range or unidirectional Yagi.
- ▼ Choose from a 115/12 VAC or 230/12 VAC power supply.
- ▼ High gain antennas require interconnection coaxial cables.

For more detailed information, please contact a Monitor representative or visit Monitor's website at [www.monitortech.com/product\\_c\\_c\\_wireless.shtml](http://www.monitortech.com/product_c_c_wireless.shtml)



Scan this with a smartphone QR-Code app for more product details.

## SPECIFICATIONS

- Power Requirements:** 115/12 VAC ( $\pm 15\%$ ); 7VA; 50/60Hz  
 230/12 VAC ( $\pm 15\%$ ); 7VA; 50/60Hz
- Ambient Operating Temp:**  $-40^{\circ}$  to  $+150^{\circ}$  F ( $-40^{\circ}$  to  $+65^{\circ}$  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
- Radio Sensitivity:**  $-110$ dBm
- 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; ENCLOSURE TYPE 4
- Mounting:** Desk, wall or pipe/rail

## ORDERING INFORMATION

Wireless Communication Interface <sup>1</sup>		
Select	Operating Band Frequency <sup>2</sup>	
1	900MHz (North America)	
	Select	Operating Voltage
	1	115/12 VAC
	2	230/12 VAC

6 - 8    4    X    0 - X    Order Number

### ANTENNA SELECTION:

Part #	Description
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:

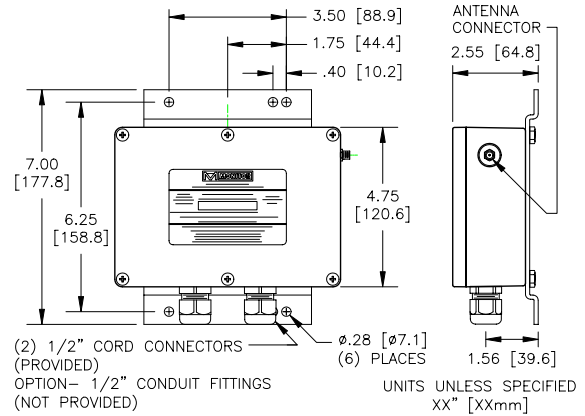
Part #	Description
6-8082	Cable, 3ft. length, N to RP-SMA connector for use with 7.2 db omnidirectional extended range and unidirectional Yagi antenna
6-8083	Cable, 10ft. length, N to RP-SMA connector for use with unidirectional Yagi and omnidirectional extended range 7.2db gain antenna

### NOTES:

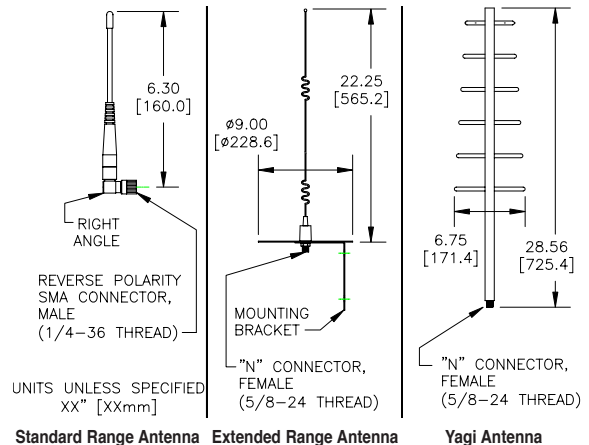
- Antenna and interconnecting cable are sold separately. (interconnecting cable is required for extended range and unidirectional Yagi ONLY).
- Consult factory for alternate available frequencies for geographies outside of North America.

## MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS



Wireless Communication Interface



Standard Range Antenna    Extended Range Antenna    Yagi Antenna



ISO 9001:2008  
 Certified

## MONITOR TECHNOLOGIES, LLC

44W320 Keslinger Road ▼ P.O. Box 8048  
 Elburn, IL 60119-8048 USA

Tel: 1-630-365-9403 ▼ In US/CAN 1-800-766-6486

Fax: 1-630-365-5646 ▼ [monitor@monitortech.com](mailto:monitor@monitortech.com)

[www.monitortech.com](http://www.monitortech.com) ▼ [www.flexar.info](http://www.flexar.info)

Blog: [www.monitortech.typepad.com](http://www.monitortech.typepad.com)

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