RadarRight™ Series 280

Non-Contact Radar Continuous Level Sensor for Liquids

For Liquids

80GHz

FEATURES & ADVANTAGES

▼ **NON-CONTACT** level measurement solution...nothing to "touch" your process.

▼ **REAL-TIME CONTINUOUS OUTPUT** provides immediate level measurements.

▼ **INCLUDES LCD DISPLAY MODULE** for easy set-up / configuration.

▼ **4^0 BEAM ANGLE** to concentrate energy for HIGH ACCURACY and reliability with materials having a wide range of characteristics.

▼ **MINIMAL "DEAD BAND" ("BLANKING ZONE")** for optimum measurement in vessel.

▼ **1-1/2" NPT THREADED, STAINLESS STEEL PROCESS CONNECTION** for easy installation.

▼ **EXTREMELY LOW EMISSION POWER** with "pulse" technology; is harmless towards the environment and human beings.

PRINCIPLE OF OPERATION

The **RadarRight™** radar level instrument emits a microwave pulse from its antenna, which travels at the speed of light to the surface of the medium below. The time-of-flight of the pulse and its reflection back to the instrument location is directly related to the empty distance in the vessel and the material level. The output from the electronics is continuously updated as the level of the material surface changes.

PRACTICAL APPLICATIONS

▼ Excellent when application requires that nothing contacts or interferes with the process.

▼ Strong performance with liquids in vessels up to 100 ft (30.5m) tall.

▼ Reliable measurements in storage tanks & process tanks under process conditions, such as, applications with low or noncorrosive media, light surface foam or agitation, condensation or vapor, etc.

▼ Suitable for various metal or nonmetal vessels.

OPTIONS

▼ Output Options:
   ▼ "Smart" RS-485 (Modbus RTU compatible)
   ▼ Analog 4-20mA (two-wire, loop powered)

▼ Variety of mounting options available.

▼ HMI[2] Local Operator Interface Control Console and **SiloTrack™** Cloud (For use with "Smart" RS-485 sensor only.)

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in f

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SPECIFICATIONS

APPLICATION	LIQUIDS
MEASUREMENT RANGE	100 FT (30.5M)
MEASUREMENT ACCURACY	+/- 0.20IN (5.0MM)
AMBIENT OPERATING TEMPERATURE	-40F TO 266F (-40C TO 130C)
PROCESS TEMPERATURE	-40F TO 392F (-40C TO 200C)
PROCESS PRESSURE	-14.5 TO 262PSI (0.1 TO 2.5MPA)
FREQUENCY	80 GHZ
BEAM ANGLE (3DB)	4 DEGREES
SIGNAL OUTPUT	RS-485 MODBUS OR 4-20MA
POWER	4-WIRE: 9-27 VDC; MAX 1.5W
	2-WIRE: 12-30 VDC; MAX 22.5MA
4-20MA LOOP IMPEDENCE	533OHMS AT 24VDC
DISPLAY/PROG LCD	INCLUDED
HOUSING	POWDER COATED ALUMINUM ALLOY
ANTENNA MATERIAL	316L AND PTFE
PROCESS CONNECTION	1-1/2" NPT
PROTECTION LEVEL	IP67/TYPE4X
APPROVALS/CONFORMITY	CSA ORDINARY LOCATIONS, CE
DEAD BAND	0.984FT (0.3M)

ORDERING INFORMATION

OPTIONAL ACCESSORIES:

PART #	DESCRIPTION
16-3070	K-FLANGE, 1-1/2 NPT (ALUMINUM)
R0514-22001[3]	BELDEN 9322, CABLE, INSTRUMENTATION, 2-LEAD, SHIELDED[4]
R0514-18001[3]	CABLE, INSTRUMENTATION, 4-LEAD, SHIELDED, 18 AWG[4]
17-8021	POWER SUPPLY, UNIVERSAL AC TO 24VDC[4]

NOTE:

1 Consult Monitor Technologies factory for all applications prior to pricing and issuing quotation.

2 Optional HMI[2] Operator Interface and **SiloTrack**™ Cloud – for use with "Smart" RS-485 version only.

3 Cable is not for plenum installations. Consult local electrical codes and verify compliance before installing.

4 Cable or power supply are not included. Must be ordered separately.

MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS

Information on this sheet is subject to change without notice

Tank Installation Example

Display Module

HMI[2]

SiloTrack™ **CLOUD**

2-Year Limited Warranty

RadarRight™ Series 480

Non-Contact Radar Continuous Level Sensor for Powders & Bulk Solids

80GHz
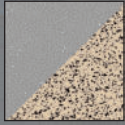
For Powders & Bulk Solids

FEATURES & ADVANTAGES

▼ **NON-CONTACT** level measurement solution...nothing to "touch" your process.

▼ **REAL-TIME CONTINUOUS OUTPUT** provides immediate level measurements.

▼ **INCLUDES LCD DISPLAY MODULE** for easy set-up / configuration.

▼ **4° BEAM ANGLE** to concentrate energy for HIGH ACCURACY and reliability with materials having a wide range of characteristics.

▼ **MINIMAL "DEAD BAND" ("BLANKING ZONE")** for optimum measurement in vessel.

▼ **GIMBAL (SWIVEL) STYLE PROCESS CONNECTION** enables aiming antenna for added measurement accuracy and avoiding internal obstacles, flow streams, etc.

▼ **AIR PURGE** to optimize sensor performance in dusty conditions.

▼ **EXTREMELY LOW EMISSION POWER** with "pulse" technology; is harmless towards the environment and human beings.

PRINCIPLE OF OPERATION

The **RadarRight™** radar level instrument emits a microwave pulse from its antenna, which travels at the speed of light to the surface of the medium below. The time-of-flight of the pulse and its reflection back to the instrument location is directly related to the empty distance in the vessel and the material level. The output from the electronics is continuously updated as the level of the material surface changes.

PRACTICAL APPLICATIONS

▼ Excellent when application requires that nothing contacts or interferes with the process.

▼ Strong performance with powders and bulk solids in vessels up to 200ft (60m) tall.

▼ Reliable measurements in dusty conditions.

▼ Suitable for various metal or nonmetal vessels.

OPTIONS

▼ Output Options:
  ▼ "Smart" RS-485 (Modbus RTU compatible)
  ▼ Analog 4-20mA (two-wire, loop powered)

▼ Variety of mounting flanges.

▼ HMI² Local Operator Interface Control Console and SiloTrack™ Cloud (For use with "Smart" RS-485 sensor only.)

Bulletin 373R

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SPECIFICATIONS

APPLICATION	BULK SOLIDS / POWDERS
MEASUREMENT RANGE	200 FT (60M)
MEASUREMENT ACCURACY	+/- 0.20IN (5.0MM)
AMBIENT OPERATING TEMPERATURE	-40F TO 266F (-40C TO 130C)
PROCESS TEMPERATURE	-40F TO 392F (-40C TO 200C)
PROCESS PRESSURE	-14.5 TO 43PSI (-0.1 TO 0.3MPA)
FREQUENCY	80 GHz
BEAM ANGLE (3DB)	4 DEGREES
SIGNAL OUTPUT	RS-485 MODBUS OR 4-20MA
POWER	4-WIRE: 9-27 VDC; MAX 1.5W
	2-WIRE: 12-30 VDC; MAX 22.5MA
4-20MA LOOP IMPEDENCE	533OHMS AT 24VDC
DISPLAY/PROG LCD	INCLUDED
HOUSING	POWDER COATED ALUMINUM ALLOY
ANTENNA MATERIAL	316L AND PTFE
PROCESS CONNECTION	VARIOUS FLANGES
PROTECTION LEVEL	IP67/TYPE4X
APPROVALS/CONFORMITY	CSA ORDINARY LOCATIONS, CE
DEAD BAND	2.62FT (0.8M)

ORDERING INFORMATION

RadarRight™ Non-Contact Radar Level Measurement - Series 480

Select	Application Series	
5	Series 480 (for Powders & Bulk Solids)[1]	

Select	Output
1	"Smart" RS-485 (Modbus)[2]
2	Analog 4-20mA (two-wire loop powered)

Select	Antenna Type
1	Standard PTFE Lens

Select	Environment/Approvals
1	Ordinary Location - CSA c/us

Select	Process Connection
2	Gimbal/Swivel (suitable flange required)

Select	Display/Programming
1	Removable Display, no BT

| 25 - 8 | 5 | x | 1 - 1 | 2 | 1 | Order Number |

MOUNTING FLANGES AND ACCESSORIES:

PART #	DESCRIPTION
25-3111	K-FLANGE (ALUMINUM)
25-3113	4" ANSI FLANGE (316L SS)
25-0071	FITTING ADAPTER, G 1/8" TO 1/8" NPT
R0514-22001[3]	BELDEN 9322, CABLE INSTRUMENTATION, 2-LEAD, SHIELDED[4]
R0514-18001[3]	CABLE, INSTRUMENTATION, 4-LEAD, SHIELDED, 18 AWG[4]
17-8021	POWER SUPPLY, UNIVERSAL AC TO 24VDC[4]

NOTE:

1 Consult Monitor Technologies factory for all applications prior to pricing and issuing quotation.

2 Optional HMI[2] Operator Interface and SiloTrack™ Cloud - for use with "Smart" RS-485 version only.

3 Cable is not for plenum installations. Consult local electrical codes and verify compliance before installing.

4 Cable or power supply are not included. Must be ordered separately.

MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS

SHOWN WITH C-CLAMP
3.86 [98.0]
8.86 [225.0]

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Silo Installation Example

Display Module

HMI[2]

SiloTrack™ CLOUD

2-Year Limited Warranty

| ARB | CPB | AUG 11 2023 | DOC-000-373R | 0 |

MONITOR

Practical solutions...at every level!

SiloPatrol® SMU

▼ **Weight and cable-based "Smart" level sensor** provides continuous or on-demand level measurement and is unaffected by material characteristics such as dielectric constant, conductivity, dust and humidity.

▼ **Innovative Hall-effect sensor array** helps to eliminate the plumb bob from getting stuck in material by providing data to the microprocessor which in turn controls the amount of power to the robust direct-drive gear motor so it can pull the plumb bob harder if needed.

NEW! ▼ **Wireless Bluetooth® set-up** allows operator to utilize a free configuration app on an Android-based device with Bluetooth® capability to easily access and configure the SMU set-up instead of having to open the unit to configure it. (App available from Monitor's Web site.)

NEW! ▼ **Modbus™ connectivity** lets the RS-485 version of SMU communicate with existing control systems.

NEW! ▼ **Widened array of programmable features** including cable cycle limit and relay output for high or low distance threshold setting, error indication or cycle operate.

▼ **Split-compartment enclosure** isolates all electrical and electronic components from the process environment to ensure long-term reliable operation.

▼ **Uniquely designed wiper seal compartment** for fast, easy servicing or replacement if necessary.

▼ **Easy to install** means that the user-friendly design and technology does not require the services of an instrumentation technician.

▼ **Measuring range up to 150 feet (46m)** in storage vessels.

Now with Wireless Bluetooth® Set-Up

Easily download free Android™-based app from Monitor Web site at www.monitortech.com/apps or scan QR-Code

Practical Tip
SiloPatrol provides reliable long-range measurement of materials with low dielectric constants such as plastics.

PRINCIPLE OF OPERATION

The heart of the **SiloPatrol®** Inventory Management System is an industry-leading cable-based "Smart" sensor called the Silo Monitoring Unit (SMU) that is designed to perform in some of the harshest and most dynamic level measurement conditions. The SMU with its state-of-the-art sensors including Hall-effect technology can be combined with a variety of operator interface and auxiliary output options to provide a practical vendor / remote managed inventory system designed for your specific requirements.

When a measurement cycle is initiated, either manually or automatically, the **SiloPatrol®** sensor (SMU) motor control system deploys a plumb bob, that is attached to a heavy-duty stainless steel cable, for descent into the vessel. The motor control circuitry regulates an optimal speed of descent that helps to eliminate cable slack, maximizes motor life and ensures that the plumb bob will stop when it contacts the material surface. The SMU measures the amount of cable deployed during descent via its unique optical sensing system. Once the optical encoder determines that the plumb bob has reached the material surface, the microcontroller reverses the direction of the motor and transmits the distance value. During the ascent of the plumb bob, the SMU measures the amount of cable retrieved in order to reconfirm the distance measurement.

PRACTICAL APPLICATIONS

▼ Use when target material characteristics may change thereby eliminating need for re-calibration.

▼ Great economical choice when accuracy is important and periodic measurements are sufficient.

▼ Measuring technique provides peace-of-mind without concern of spurious reflections associated with other technologies.

▼ Typical applications include, but are not limited to: Grains, Feeds, Powders, Coal, Bulk Chemicals, Cement, Rocks, Sand, Limestone, Plastic Pellets, Plastic Regrind, Slurries, Liquids and Oils.

▼ Measure many liquids or slurries with optional ball float plumb bob or detect some settled solids covered in water with optional solid/water interface plumb bob.

For more detailed information, please contact a Monitor representative or visit Monitor's website at http://www.monitortech.com/product_c_c_sp.shtml

OPTIONS

▼ Three models to choose from:
  ▼ Smart RS-485 version with Bluetooth® set-up for use with **HMI²** local operator interface or **SiloTrack™** inventory management software. Also includes Modbus connectivity to communicate with other operator interfaces or control systems being used at facilities that utilize Modbus. (Units are backwards compatible.)
  ▼ Analog output version with Bluetooth® set-up for use as a standalone transmitter that provides an updated analog signal each time a new measurement is made. (Units are backwards compatible.)
  ▼ Pulse output version generates AC or DC pulses in response to a request for a measurement from a contact input. This output can be used to provide direct input into a PLC.

▼ Choice of 0°, 5° or 10° freeze-resistant mounting flange.

▼ Selection of plumb bobs to fit specific application needs.

▼ Available in ordinary location, CSA$_{US/C}$ hazardous location or ATEX hazardous location.

▼ **WirelessEZ** communication interface is available.

▼ Optional independent analog & relay outputs are offered for RS-485 systems using an Auxiliary Output Enclosure (AOE).

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SPECIFICATIONS

More product specifications can be found on Monitor's Web site.

Power Requirements:	115VAC or 230VAC(±15%), 50/60 Hz	**Output Signal:**		
Power Consumption:	6VA continuous, 50VA intermittent	Standard "Smart":	RS-485 half-duplex, isolated, proprietary protocol	
Process Temperature:	-40°F to 300°F (-40° C to 150°C)		Address Selection - 1-16 (SiloPatrol); 1-247 (Modbus)	
Ambient Operating Temp.:	-40°F to 150°F (-40° C to 65°C)		Relay Output - 5A @ 250VAC max, isolated, dry contact	
Max. Internal Bin Temp.:	Up to 300°F (149°C) with use of bare stainless steel cable; Up to 200°F (93°C) with use of nylon or polyethylene jacketed cables	Pulse:	1 pulse per 1/10ft or dm, isolated, dry contact, selectable: 0.1ft - 12Hz, time-on 40mS, time-off 45mS dm - 4Hz, time-on 40mS, time-off 210mS AC Pulse - 70mA max @ 24-250VAC DC Pulse - 70mA max @ 24VDC Relay Output – 5A @ 250VAC max, isolated, dry contact	
Max. Vessel Pressure:	15 PSI	Analog:	4-20mA, reversible to 20-4mA, isolated; Self powered 500 Ohms maximum loop resistance Relay Output – 5A @ 250VAC max, isolated, dry contact	
Measurement Range:	150 feet maximum (45.7 m)			
Measurement Rate:	1.0ft/sec (typical) (0.3 m/s)			
Accuracy:	± 0.25% of distance reading			
Repeatability:	0.1ft (30 mm)			
Resolution:	0.01ft (0.12in/3mm)	**Enclosure:**	Cast aluminum w/ powder coat finish	
Conduit Entry:	(2) 3/4" NPT	Mounting:	Freeze-Resistant "K" flange, 8"dia w/ 7" bolt circle	
Shipping Dimensions: (L x W x H)	34 x 15 x 16" (864 x 381 x 406mm)			
Shipping Weight-Approx.:	45lbs (20.4kg) -SMU, plumb bob, cable	**Approvals:**		
Air Purge Connection:	1/4" NPT	Ordinary Location:	CSA$_{US/C}$; CE Mark	
Wiring Distance ("smart"):	3,280ft (1000m) max @ 9600 baud, 26 AWG	Hazardous Location:	CSA$_{US/C}$: Class II, Groups E, F & G; Class III ATEX: II 1/2 Dc T 75°C Ex tD A21 IP6X T75°C (Ta -40°C to +65°C)	
Enclosure Rating:	NEMA 4X / ENCLOSURE TYPE 4X; IP66			

ORDERING INFORMATION

SiloPatrol SE Silo Monitoring Unit (SMU SE)

Select	Output
1	Standard "Smart" RS-485 communications
2	Pulse (retro) output
3	4-20mA analog output

Select	Environment
1	Ordinary locations
2	Hazardous locations - CSA us/c (North America)
3	Hazardous locations - ATEX

Select	Mounting Flange
1	Standard K-flange
2	5° K-flange
3	10° K-flange

Select	Cable Type
	(Customer Specified Length up to 150ft [46m])
1	Nylon jacket
2	Stainless steel
3	Polyethylene jacket

Select	Operating Voltage
1	115 VAC
2	230 VAC

6 - 8 5 X X — X X X 2   **Order Number**

ACCESSORIES [1]:

| Part #	Description
6-2190	Digestible Plumb Bob
6-2021	Cast Epoxy Plumb Bob
6-3103 [1]	Standard Cast Aluminum Plumb Bob
6-3123	Cast Aluminum with Teflon® Coating Plumb Bob
6-3136	316 Stainless Steel Plumb Bob
6-4106	316 Stainless Steel Inverted Cone Plumb Bob
6-4126	Teflon®-Coated 316 Stainless Steel Inverted Cone
6-4108	316 Stainless Steel Ball Float
6-4128	Teflon®-Coated 316 Stainless Steel Ball Float
6-4112	Solid / Water Interface-Style SS Plumb Bob
6-3125	5° Mounting Flange
6-3128	10° Mounting Flange
6-8010	Tablet, WiFi / Bluetooth®
R0514-22001 [2]	Belden® 9322 RS-485 communication cable (Overall Beldfoil® Shield - 100% Coverage, PVC Insulation, Chrome PVC Jacket, Nominal OD is .201" [5.10mm])

NOTES:
1 6-3103 cast aluminum plumb bob is included with each SMU SE.
2 R0514-22001 cable is not for plenum installations. Consult local electrical codes.

ISO 9001:2008 Certified

2-Year Limited Warranty

MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS
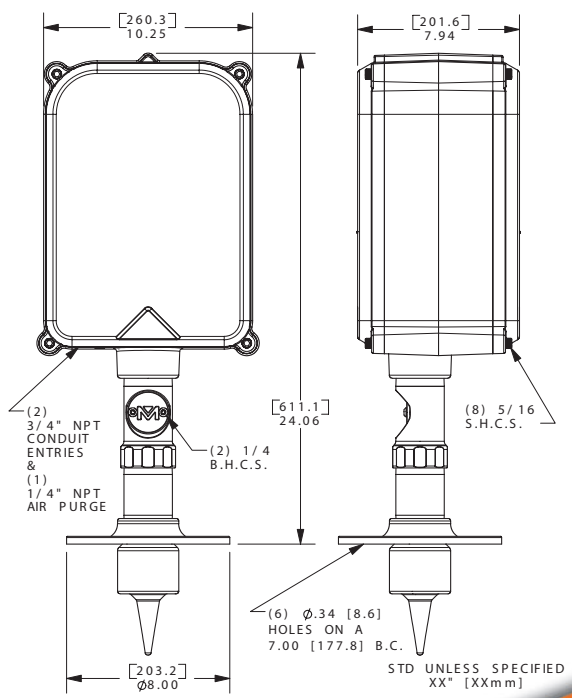
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Android™ is a trademark of Google Inc.
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Missouri Filter & Process Equipment Co
MOFILCO-Quality, Value, Service
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St Louis MO 63131

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mofilco@mofilco.com

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2

SiloTrack™ CLOUD

MONITOR

Remote Inventory Management System - Continuous Level Measurement

FEATURES & ADVANTAGES

▼ **Flexible Remote Inventory Management**
- ▼ Access real-time material inventory data from any device that has an Internet connection.
- ▼ Intuitive, flexible and powerful graphical user interface.
- ▼ Manage multiple locations with multiple silos / vessels.
- ▼ Control user permissions through secured login profiles.

▼ **Inventory Information at Your "Fingertips"!**
- ▼ View distance, level, volume, weight, percentage and ullages (empty space) for silos.
- ▼ See multiple silos on one screen. Filter to see only specific locations or silos.
- ▼ Set level alarms and monitor sensor status... Configure e-mail and text notifications.
- ▼ Create, save and generate configurable reports.
- ▼ Automatically e-mail reports to specific users. (Facility Manager, Dispatcher, etc.)
- ▼ Access historical data to create trends, improve inventory / procurement efficiencies.

▼ **Secure and Reliable Communications**
- ▼ Data is secure and encrypted.
- ▼ Connection from Gateway(s) to the Cloud-based server can be either through cellular or Ethernet.

View multiple silos at one time.

See overview & history of a silo.

PRINCIPLE OF OPERATION

Silo ™ *CLOUD* Inventory Management System is a web-based application that provides users with an unmatched, flexible user interface from any device with Internet access for Monitor's "Smart" RS-485 (Modbus) continuous level sensors. **Silo** ™ *CLOUD* allows for monitoring up to 32 sensors per Gateway including the **Silo** ® SMU cable-based sensors and/or Monitor's **Radar** ™ non-contact radar sensors. The sensor data collected through the cloud-based server can be accessed at any time from any place to view current status, review history and create reports to optimize inventory management.

PRACTICAL APPLICATIONS

▼ **Ideal for Remote Managed Inventory / Vendor Managed Inventory (RMI / VMI) solutions.**

▼ Optimize frequency of deliveries & transportation costs.

▼ Receive timely material inventory levels from anywhere.

▼ Does not require the installation of software on your computers (i.e. "no code on the client").

▼ Access data history and create customizable reports to share information across functional departments.

OPTIONS

▼ Universal 85-265VAC or 24VDC Operating Voltage (Gateway)

▼ Standard or High Gain Antenna (Gateway)

▼ Cellular or Ethernet Connectivity (Gateway)

▼ **WirelessEZ** Communication Interface (radio modem) can be used to replace the RS-485 wiring between level sensors & the Gateway

For more detailed information, please contact a Monitor representative or visit Monitor's website at https://www.monitortech.com/product _conti.shtml Or scan this with a smartphone QR-Code app.

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SPECIFICATIONS

SiloTrack™ *cloud* Gateway

Power Requirements	
AC:	115-230VAC ± 15%, 50/60 Hz
DC:	24VDC ± 15%
Power Consumption	
AC:	70W (1.5A max @ 115VAC)
DC:	18W max
AUX 24VDC Output:	1.7A max (AC Version Only)
Ambient Operating Temp:	-30° F to 149° F (-34° C to 65° C)
Sensor Communication:	RS-485 half-duplex, non-isolated, Modbus RTU protocol 9600/8/N/1
Sensor Channels:	One (1) 32-channel network (32 channels total)
Cellular Wireless Interface: [LTE - North America (M5)]	LTE CAT 4: 700(B12,13)/850(B5)/AWS(B4)/1900(B2) 3G HSPA+: 850/1900 MHz Transfer rate (max): 150 Mbps down, 50 Mbps up
FCC ID:	R17LE910NA V
Emissions / Immunity:	CE, FCC Part 15 Class B, AS/NZS CISPR 22, EN55024, EN55022 Class B
Indicators:	7 LEDs (Power, Service, WWAN, 3x Signal Strength, User Programmable)
Enclosure Material:	PBT / PC
Enclosure (HxWxD):	12" x 8" x 6.4" (305mm x 203mm x 163mm)
Environmental Protect:	ENCLOSURE TYPE 4X, IP65
Approvals:	UL Listed (Power Supply & Router)

SiloTrack™ *cloud* Application

Device Operating System:	Designed to work with most operating systems such as Mac, iOS, Windows, Linux, Android
Device Browser Requirement:	Designed to work with most Internet browsers such as Chrome, Firefox, Safari, Explorer, Edge
Export File Format:	.csv

MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS UNLESS OTHERWISE STATED
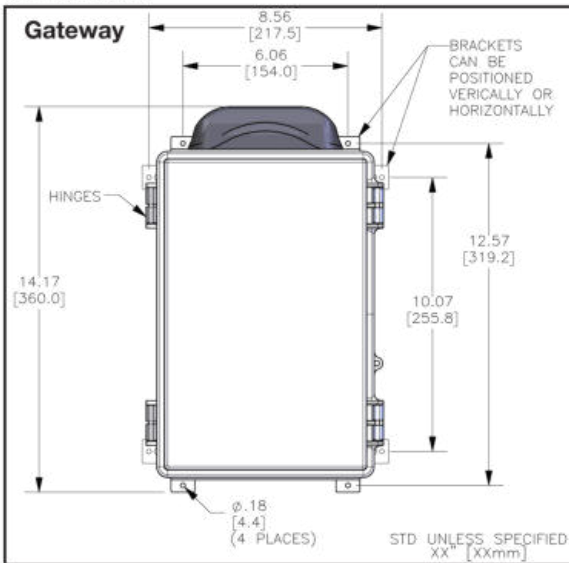
ORDERING INFORMATION

Information on this sheet is subject to change without notice.

SiloTrack™ Cloud Inventory Management System - Gateway Notes 1,2

Select	Model Series					
7	SiloTrack Cloud Gateway and Inventory Management System					
	Select	Gateway Connectivity (Pre-Programmed at the Factory)				
	1	North America Cellular (4G LTE) and Ethernet				
	2	Other - TBD (Consult Factory)				
	3	Other - TBD (Consult Factory)				
		Select	Communication Protocol			
		1	Modbus - SiloPatrol, RadarRight Note 3			
			Select	Environment		
			1	Ordinary Locations		
				Select	Operating Voltage	
				1	Universal 85-265 VAC	
				2	24 VDC	
					Select	Antenna
					1	Standard
					2	High Gain (Consult Factory)

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SiloTrack™ Cloud Inventory Management System - Subscription Service Note 1

Select	Service				
7	SiloTrack Cloud Application Subscription				
	Select	Subscription Configuration Note 4			
	8	Host and Ethernet Connectivity (Annual Contract)			
	9	Host and Cellular Connectivity (Annual Contract)			
		Select	Cellular Data Package Size		
		0	No Cellular Data Plan Required		
		1	Standard		
		2	Enhanced (Consult Factory)		
			Select	Geographic Coverage	
			1	United Sates	
			2	TBD (Consult Factory)	
			3	TBD (Consult Factory)	
				Select	Carrier Note 5
				0	No Cellular Carrier Required
				1	Verizon
				2	AT&T
				3	TBD (Consult Factory)
				4	TBD (Consult Factory)

6 - 8 7 X X - X X Order Number

NOTE:
1. A Subscription Service is required for each Gateway.
2. Up to 32 sensors per Gateway. Minimum one Gateway per location.
3. If Gateway is to be used with pre-existing SiloPatrol® SMU's and / or RadarRight™ sensors, please consult the factory to confirm that the sensors are Modbus (RS-485) compatible.
4. Subscription fee is charged once a year, in advance.
5. Verizon® is the primary (default) cellular carrier. Please select Verizon unless they do not provide adequate coverage in your area.

ACCESSORIES / REPLACEMENT PARTS:

Part #	Description
6-8010	Tablet, WiFi / Bluetooth
17-8021	Rplc. Power Supply, Universal AC to 24VDC
6-1964	Rplc. PCB Assembly, D-Sub Adapter
TBD	Rplc. Antenna, Low Profile, Standard (Consult Factory)
TBD	Rplc. Antenna, High Gain (Consult Factory)
TBD	Rplc. Module, Router, 4G, Cellular / Ethernet (Consult Factory)

Durable Gateway for wireless or Ethernet connection to the Cloud-based server.

OVERVIEW

Continuous Level Sensor(s) on Vessel(s) → Gateway(s) on Site (up to 32 sensors per Gateway) → Cloud-Based Server → Access SiloTrack™ *cloud* with Smartphone, Tablet, Laptop, PC → See Current Status, View History & Create Reports