WirelessHART Inclinometer™

Inclinometer PCU in magnetic mounting bracket with right hand circular polarized antenna and 4-cell battery pack

Inclinometer PCU for use with a standard mounting bracket with rigid monopole antenna and 2-cell battery pack

Overview

The Syscor Tracker™ WirelessHART Inclinometer is an intrinsically safe device designed for Zone 0 deployment that contains a specialized, high accuracy inclination sensor (accurate to 0.1°). This device integrates seamlessly into any standard WirelessHART network.

Inclinometer sensor data is communicated, along with network and battery status, via the WirelessHART protocol to a WirelessHART Gateway, which in turn routes the data to industry standard monitoring and control systems as required.

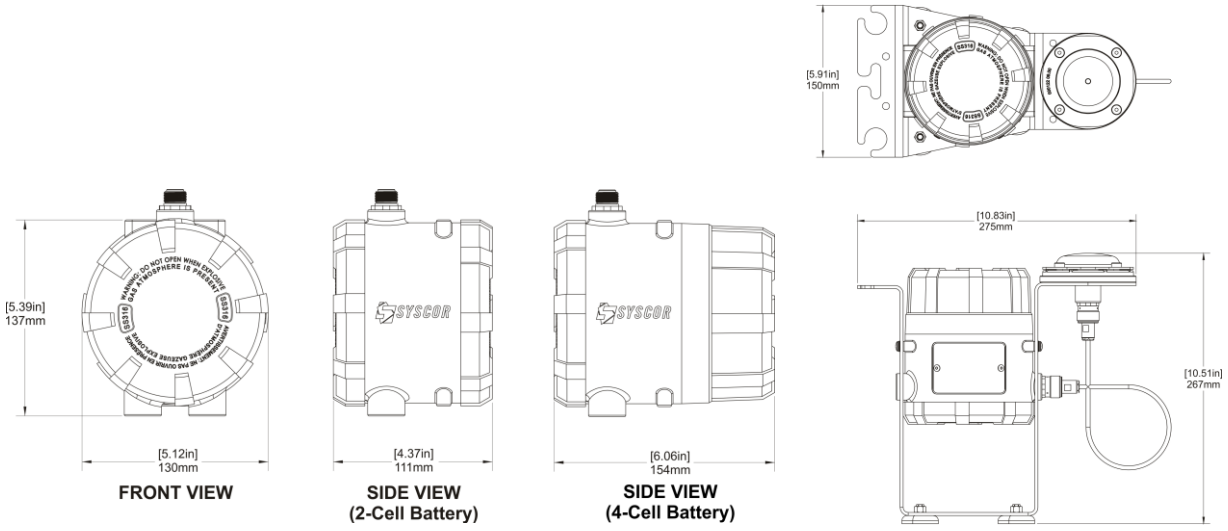
Related Solution Packages

Refer to the FR-Tracker™ Aboveground Storage Tank Floating Roof Monitoring Solution Package document.

The Syscor Tracker WirelessHART Inclinometer was originally designed specifically for floating roof monitoring for aboveground storage tanks, however, it can be used for any monitoring application where sensitive and accurate inclination detection is required.

Key Features

- Intrinsically safe design for Zone 0 deployment
- Extensively tested and independently qualified devices
- Stainless steel (SS316) housing
- Magnetic mounting bracket provides secure installation
- Self-contained units are easily installed and removed
- Easily installed on in-service facilities and equipment, no hot or cold metal work required
- Wireless, battery powered units allow rapid deployment
- Intrinsically safe Syscor Li-$SOCl_2$ battery packs provide up to 10 years of power
- WirelessHART (IEC 62591) mesh technology creates self-forming, self-healing, scalable, secure networks
- WirelessHART technology allows easy addition and removal of units from an existing network
- Integrates easily with industry standard WirelessHART Gateways



Inclinometer PCU **Typical Installation**

Specifications

Functional Specifications	
Power Usage	Typical:< 0.1 W
Internal Sensors	Inclinometer, accelerometer, temperature
Wireless Comm.	WirelessHART IEC 62591 2.4 GHz DSSS
Wireless Data Update Rate	User-selectable; 1 second to 1 hour
Display	4 LED indicators for status and diagnostics
Physical Specifications	
Power Supply	Replaceable, intrinsically safe, Li-$SOCl_2$ battery pack; up to 10 yr. battery life depending on application and sampling rate 2-cell battery pack: 7.2V 19.0Ah 136.8Wh 4-cell battery pack 7.2V 38.0Ah 273.6Wh Enclosure: ABS plastic
Communication	Two (2) terminals for communication with HART field communicators
Enclosure	Housing: Stainless steel SS316 Rating: IP67
Antenna Options	▪ Right hand circular polarized, 2.4GHz patch antenna, N-type, 4.9dBi peak gain ▪ Omni-directional, rigid monopole antenna, N-Type male, straight, 3dBi peak gain
Antenna Port	N-Type female
Weight	3.75 kg [8.3 lbs]
Mounting	Magnetic mounting bracket; optional 3M VHB adhesive for aluminum surfaces
Performance Specifications	
Electromagnetic Compatibility	Meets all relevant requirements of EN 62479:2010 and EN-61326-1:2013
Inclination Detection	High accuracy (0.1°), dual-axis digital inclinometer/accelerometer sensor Digital inclination data, 0.025° resolution Digital acceleration data, 0.244 m*g* resolution ±1.7 g accelerometer measurement range
Temp. Sensor	±1°C [1.8°F] resolution
Operating Temp.	-40°C to 60°C [-40°F to 140°F]

Product Certifications Note: Certifications apply to the PCU + battery pack assembly	
USA	Intrinsic Safety: [CSA] 4792360 FCC: 2AAZE-000697
Canada	Intrinsic Safety: [CSA] 4792360 IC: 11413A-000697
Product Markings	North America: CL 1 DV 1 GP C&D T4 Europe: 11 1G Ex ia 11B T4

How to Purchase

Visit syscor.com for more information. Contact Syscor to discuss your specific site and application requirements.

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