



Echo Point

Three Wireless Choices

High Sensitivity Dual
Thru-Coating Single
Ultra-High Temperature

Up to 3 times more sensitive than competing sensors

Thru-Coat technology eliminates costly coating removal

High Temp 275°F (135°C) & Ultra-High Temp (932°F (500°C))

Certifications

Ex ia [ia Ga] IIC T4 Ga CE North American (Zone System):

Class I, Zone 0 A Ex [ia] IIC T4

Ex [ia] IIC T4

North American (Division System):

Class I, Division I, Groups A, B, C, D T4

Communication

Echo Point uses WirelessHART to communicate directly with compatible gateways to Cosasco Data Online. Cosasco Data Online supports back-end communication via HART-IP, Modbus TCP/IP, or OPC to DCS and SCADA systems.

Transducer Choices

Echo Point Thru-Coating Single is perfect for applications where coating removal is not an option. High sensitivity duals are ideal for monitoring identified volumetric defects for maximum thin-wall sensitivity. Ultra-High Temp has specialized coupling technology to monitor the hottest processes. All three options come standard with 303 stainless steel clamping hardware or magnetic mounts.

Echo Point integrates with Cosasco Data Online to offer advanced analytics and seamlessly integrate with other Cosasco devices.

Echo Point is Cosasco's newest technology that pushes the boundaries of wireless ultrasonic monitoring. Ultrasonic transducers are powered by off-the-shelf batteries and uses WirelessHART to communicate. Embedded temperature sensor with a temperature correction algorithm provides high accuracy measurements.

Environment

Echo Point is rigorously certified to operate in the most hazardous and high-risk environments. All transducers are designed with a minimum high temperature of 275°F (135°C) and Ultra-High Temp has a maximum of 932°F (500°C).

High Temperature & Ultra High Temperature Transducer Specifications

	Thru-Coating Single	High Sensitivity Dual	Ultra-High Temp
Probe surface temperature	-20°F (-28°C) up to 275°F (135°C)	-20°F (-28°C) up to 275°F (135°C)	-20°F (-28°C) up to 932°F (500°C)
Measurement range	0.125" to 1.00" (3-25mm)	0.040" to 6" (1-150mm)	0.125" to 1.00" (3-25mm)
Measurement resolution	0.001" (0.025mm)	0.001" (0.025mm)	0.001" (0.025mm)
Thru-Coating	Yes*	No	No
Min. pipe diameter	2" NPS	2" NPS	2" NPS
Resolution	0.001" (0.025mm)	0.001" (0.025mm)	0.001" (0.025mm)
Element(s)	Single (delay-line)	Dual	Single (delay-line)

Entire Device Specifications

Size (height x width x depth)	14.90 x 4.41 x 2.09 in (379 x 112 x 53 mm)
Weight	~2.25 lbs. (1.02 kg)
Battery life (typical) †	5 years @ 2 readings/day
Mounting	Magnetic base; band clamp
Data	Temperature Corrected Thickness, Raw Thickness, Surface Temperature, RF waveform, time/date stamp
Data access	Cosasco Data Online, DCS or SCADA
Protocol	WirelessHART
Measurement Frequency	Default is every 12 hours (user configurable to every hour)
Node count	Up to 200 Echo Point units per gateway

* External FBE and homogenous PU/PE/PP coatings

† Typical Values. Results may vary based on range, RF noise, and temperature

©2021 Cosasco. All rights reserved. Echo Point® is a registered trademark.

Multiple patents pending.

