HotSense™ Measurement Hub for low cost, manual data collection from installed ultrasonic probes

Improve measurement precision through reduced operator variability and enable data trending to facilitate predictive and preventative maintenance of critical assets

Complete fixed-point HotSense™ ultrasonic thickness measurement solution for use with standard UT gauges and flaw detectors. The lowest cost entry point for non-invasive corrosion and erosion in-service monitoring. For applications including thickness, corrosion, erosion / wear and gas void / entrainment in refining, oil and gas, nuclear and energy industries.

Keywords: corrosion, erosion, in-service monitoring, extreme environments, high temperatures.









MEASUREMENT HUB

- Full fixed point non-invasive corrosion and erosion monitoring solution utilising the HotSense™ extreme environment UT probes for -55 to +550 °C [-67 to 1,022 °F] applications.
- **No electronics, batteries or wireless** make measurements by connecting an industry standard UT thickness gauge or flaw detector.
- ATEX / IECEx Zone 0 ready to enable quick and safe deployments to be made in the most hazardous and inaccessible locations.
- Better data with fixed probes providing increased precision, accuracy, and measurement frequency.
- **Low-cost** entry into non-invasive corrosion and erosion monitoring using standard UT hardware and procedures.
- Flexibility to enable upgrade to a full automated wireless system.

DEPLOYMENT

- HotSense™ Measurement Hub™ houses intrinsically safe sensor connections to enable quick and easy measurements to be collected from HotSense™ from an accessible location using your existing NDT equipment and procedures.
- Compatible & configurable to Ex location installations to meet site requirements and enable simple data collection under hot work permits.
- Probes installed on live plant in minutes for in-service measurements, designed to survive the harshest of environments.
- The widest range of sensor deployment options for pipes and vessels.

SOLUTIONS

- Your first step towards in-service automated integrity monitoring which uses your current NDT equipment and personnel.
- Increase your accuracy and precision by monitoring using installed probes -up to 5X increase in precision compared to standard inspection methods.
- Facilitate measurements in hot, inaccessible locations and increase data collection frequency for improved trending to support RBI, FFS and FEA.
- Save operational costs with replacement of manual inspections, reducing scaffolding and insulation removal requirements.
- Increase safety with reduced exposure to hazards and man-hours at asset.







MEASUREMENT HUB™ APPLICATION SPECIFICATION

PARAMETER	VALUE
Compatible UT Probes	HotSense™ DE, HotSense™ 380, HotSense™ UHT
Number of probes per Hub	1 to 4
Thermocouple type	K-type with IEC miniature connector
Number of thermocouples per Hub	0 to 4
Maximum distance from measurement location	3 m or 16 m total cable length options
Sensor connector*	Lemo 00 (adapter available by request)
UT hardware compatibility	Any meeting or ASTM E1065 with A-scan representation. Contact Ionix for compatibility enquiries. Optimised gauges available from Ionix.
Measurement standard	Solution compatible with ISO 16809 and conventional in-service UT procedures

^{*}Variations available via special request.

For other specification requirements or to purchase measurement hardware please contact our sales team.

MEASUREMENT HUB™ ENCLOSURE SPECIFICATION

PARAMETER	VALUE
IP Rating	IP66
Ex compatibility	Suitable for installation in ATEX / IECEx Zone 0 & 20 to IEC 60079-14
Material of construction	Stainless Steel
Dimensions	See diagram
Hub access	Lockable, swing door
Mounting	Wall, pipe, pole or rail mounted with straps
Measurement Hub™ can be upgraded to a fully automated and wireless monitoring	

solution at any time.

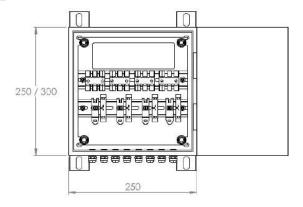
HAZARDOUS LOCATION INFO

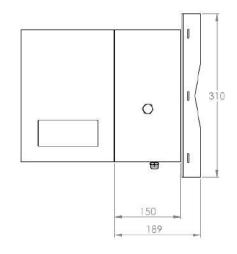
HotSense™ probes and supplied thermocouples are certified to intrinsically safe standards.

The Measurement Hub™, when installed within the requirements of IEC 60079-14, is compatible with Zones 0 (gas/vapour) and 20 (dust) hazardous locations.

Certificates and Descriptive System Documents available on request.

Measurements must be taken under a hot work permit or other recognised safe method when installed in an explosive environment.







Get in touch for consultation:



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