

ULTRACORR®
By **COSASCO®**

Ultracorr®

**High Resolution Pipe Thickness
Monitoring System**



- **Ideal For ICDA* Compliance**
- **Highest Resolution Transducer Available**
- **Portable Instrument**
- **Download Stored Readings Directly to PC For Analysis**
- **Battery Operated For Maximum Versatility**
- **Smart Sensor Enables Electronic Tagging**
- **Resolution of 0.1 mil (0.0001 in) Provides True Corrosion Monitoring**
- **Temperature Measurement With Integrated Temperature Sensor**
- **Ideal For Direct Wall Loss Monitoring On a Pipe Elbow or Buried Pipeline**

The Ultracorr® system combines very high sensitivity monitoring sensors with the non-consumable nature of inspection devices. It represents a breakthrough for internal corrosion monitoring at locations that are difficult to access. Once installed, Ultracorr® provides years of continuous service without the need for replacement.

Internal corrosion is one of the leading causes of pipeline failure – and one of the most difficult to detect. Pipeline

accidents have caused catastrophic injury and destruction, resulting in the US Department of Transportation imposing integrity management requirements on pipeline operators. To aid operator compliance, Cosasco has developed an efficient, reliable means of monitoring internal corrosion before it causes problems.

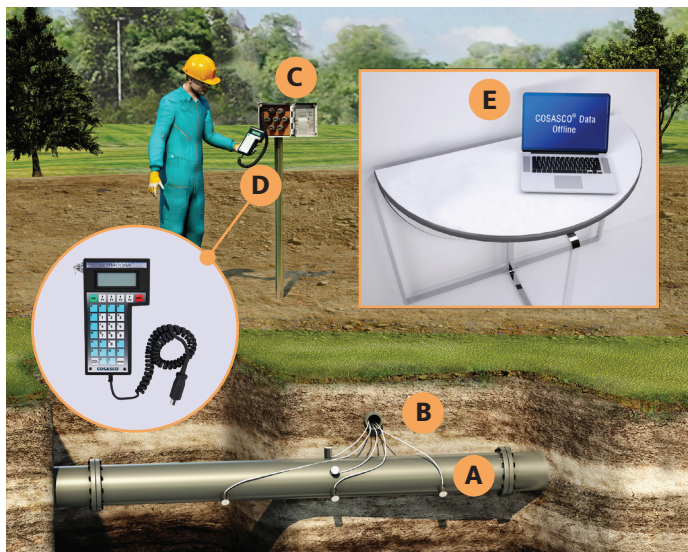
Ultracorr® will help solve the problem of monitoring in locations where sensor access is difficult, and will particularly

*ICDA – Internal Corrosion Direct Assessment

suit buried pipeline operators faced with the problem of ICDA* activities. After the initial dig to expose and ultrasonically examine HRHC (high risk, high consequence) locations, Ultracorr® sensors can be installed on the line, and the excavation backfilled. They can subsequently be accessed for measurement via a test post, located at ground level, above

the line. Readings can be taken every 3-6 months to verify the corrosion behavior thereby minimizing or eliminating the need for costly future excavations or they can be taken on short intervals using the datalogging option (average five-minute / read).

Ultracorr 1 (Spot Reader)	Ultracorr 2 Data Logger (U-200)	Transducer (Sensor)
Thickness Measurement (Range) 0.1 - 2.0" (2.5-50mm) up to 125' Cable	Thickness Measurement (Range) 0.1 - 2.0" (2.5-50mm) up to 125' cable	Thickness Measurement (Range) 0.1 - 2.0" (2.5-50mm) up to 125' cable
Resolution (Sensitivity) 0.1mil (0.0025mm)	Resolution (Sensitivity) 0.1mil (0.0025mm)	Temperature Range: -10°C to 85°C
Instrument Operating Temperature 32°F to 122°F (0°C to 50°C)	Instrument Operating Temperature -40°F to 158°F (-40°C to 70°C)	Specifications 1" Diameter x 1" High
Data Storage Memory Storage: Nonvolatile Up to 50 sensors can store up to 256 readings	Data Storage Data Logger: 1 Sensor with 2000 Readings Time and Date Stamped, Memory: Non-Volatile	Cable Length Range: up to 125' Cable
Interface USB (cables included), RD232 (optional)	Communication Interface Wireless BT Data Transfer	
Battery Requirements 6 AA Alkaline	Battery Requirements 2 x 3.6V AA Lithium Cells (RCS P/N 095820) Battery Capacity: 2,000 readings	
Specifications Size: Approx. 4" x 8" x 2" (10cm x 5cm) Weight: 1.5 lbs. (0.068kg)	Specifications Size: Approx. 4" x 8" x 2" (10cm x 5cm) Weight: 1.5 lbs. (0.068kg)	



Typical Ultracorr System

- A UST Ultracorr sensor
- B Signal cabling 125'
- C Reading point (junction box for multiple sensors)
- D Ultrasonic Pipe Thickness Monitor/Remote Data Reader
- E PC running CDO software

Ultracorr® Instrument (ITEM – D)

Model	Description
Ultracorr®	Ultrasonic Pipe Thickness Monitor/Remote Data Reader with Cosasco Data Software for download, analysis, and storage



Ultracorr® Instrument

Ultrasonic Transducer (ITEM – A)

Model	Description			
UST	Ultrasonic Transducer			
↓	Code	Cable Type Option		
	0	Polyurethane Jacket		
	1	Polyurethane Jacket with Stainless Steel Armor		
	↓	Code	Termination Option	
0		Weatherproof Connector		
↓	Code	Cable Length		
	L	Cable Length in Feet (Max 125 Ft)		
↓	↓	↓		
UST	1	0	50	← Example



Ultrasonic Transducer

Couplant

P/N	Description
744006	Epoxy/Couplant Kit (includes cleaner) (One kit required per transducer for installation)

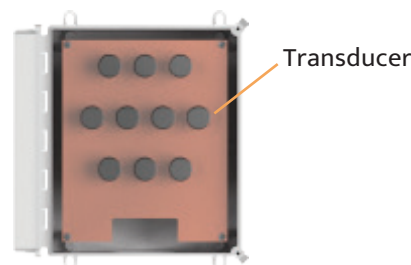
Enclosure (for Sensors) (ITEM - C)

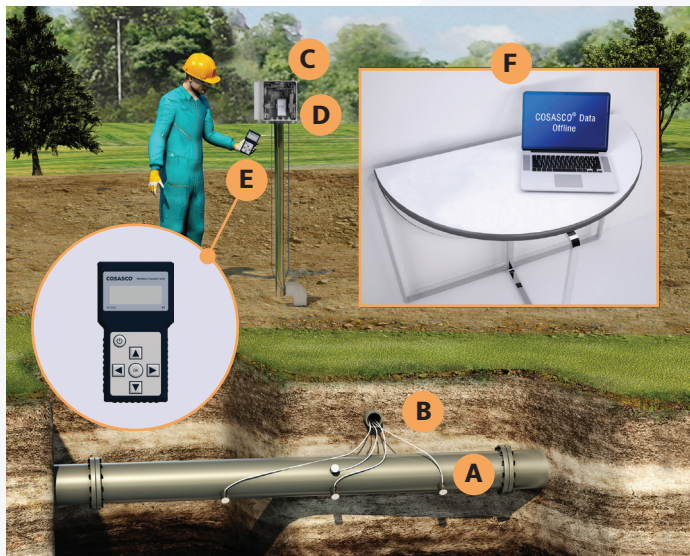
The Ultracorr® UT sensors can be mounted inside a protective enclosure suitable for industrial environments. The enclosure provides environmental protection and flexible sensor routing options suitable for field installations.

Protection Rating: IP66 / NEMA 4X

Material: Fiberglass reinforced enclosure suitable for corrosive environments. Stainless Steel Enclosure options are available upon request.

P/N	Description
744014	Enclosure for Ultracorr Sensors, Up to 5. Single Conduit/Pipe Option with 2" NPT Locknut
744014-10	Enclosure for Ultracorr Sensors, Up to 10. Single Conduit/Pipe Option with 2" NPT Locknut
744014-15	Enclosure for Ultracorr Sensors, Up to 15. Single Conduit/Pipe Option with 2" NPT Locknut





Typical Ultracorr 2 Datalogging System

- A UST Ultracorr sensor
- B Signal cabling 100' up to 125'
- C Reading point (junction box for multiple Data Loggers and Sensors)
- D Ultracorr 2 Data Logger
- E TU-500 for set up and data collection
- F PC running CDO software

Ultracorr® 2 Data Logger (ITEM – D)

Model	Description
U-200	Ultrasonic Pipe Thickness Monitor System. Datalogging with Cosasco Data Software for download, analysis, and storage.

Transfer Unit (ITEM – E)

Model	Description
TU-500	Transfer Unit, batteries, and user manual.

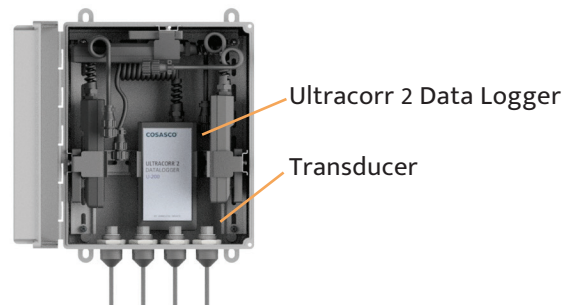
Enclosure for Ultracorr Data Loggers and Sensors (ITEM - C)

The **Ultracorr® datalogging instrument and individual UT sensors** can be mounted inside a protective enclosure designed for reliable long-term corrosion monitoring in industrial environments. The enclosure provides environmental protection and flexible sensor routing options suitable for field installations.

Protection Rating: IP66 / NEMA 4X

Material: Fiberglass reinforced enclosure suitable for corrosive environments. Stainless Steel Enclosure options are available upon request.

P/N	Description
744028-1-1	Enclosure for Ultracorr Data Logger, 1 Data Logger Mounting and 1 Sensor Port.
744028-2-2	Enclosure for Ultracorr Data Logger, 2 Data Logger Mountings and 2 Sensor Ports.
744028-3-3	Enclosure for Ultracorr Data Logger, 3 Data Logger Mountings and 3 Sensor Ports.
744028-3-3	Enclosure for Ultracorr Data Logger, 4 Data Logger Mountings and 4 Sensor Ports.



For configurations requiring more than 4 instruments, please contact Cosasco

Pipe Protection Kit

STOPAQ is a proven way of protecting pipe and preventing corrosion after the Ultracorr transducer installation. STOPAQ is considered a visco-elastic fluid, which means it feels like a solid or rubber, but still has the characteristics of a fluid. These fluid properties allow the material to adhere to the pipe remarkably while providing resistance against cathodic disbanding and giving excellent corrosion protection.

The STOPAQ materials used in the transducer installation repair are as follows:

- STOPAQ Wrapping band CZ H Paste – To mold around the Transducer.
- STOPAQ CS H Wrapping band – To cover the CZ H Paste.
- STOPAQ Covering Tape – For mechanical protection of the CZ H Paste and Tape

P/N	Description	P/N	Description
744018-10	Coating repair kit for 10 transducers (STOPAQ)	744018-40	Coating repair kit for 40 transducers (STOPAQ)
744018-20	Coating repair kit for 20 transducers (STOPAQ)	744018-50	Coating repair kit for 50 transducers (STOPAQ)
744018-30	Coating repair kit for 30 transducers (STOPAQ)		