

ER DATALOGGER

ER-200

The ER-200 BT Electrical Resistance (ER) Datalogger is ideal for use in any process media and remote locations where direct online operation is not possible. With built-in BT wireless communication technology, stored corrosion rate and temperature data may be downloaded from the ER-200 from up to 32 ft. (10 m) with clear line of site with a handheld Transfer Unit (TU-500). Without any wires, connectors, or adapters, configuration and download of readings is quicker and easier than ever.

Readings from the TU-500 are easily transferred to a PC running Cosasco Data Offline Corrosion Management Software. Cosasco Data Offline provides graphical displays of corrosion data for immediate identification of corrosion upsets. With Cosasco Data Offline Software multiple probes and additional corrosion related parameters, such as temperature from ER Temperature probes, can be simultaneously reviewed.

Electrical Resistance Metal Loss Measurements in Process Media

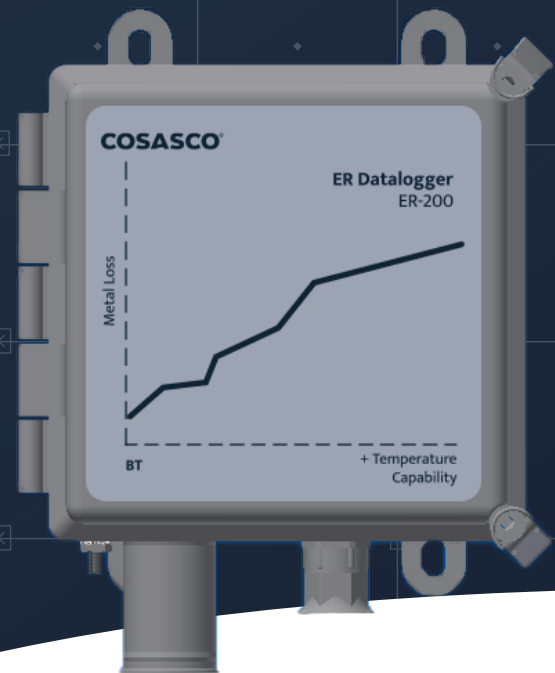
- Reads all ER standard and ER temperature probes
- Rapid Measurement Cycle
- Improved resolution

Bluetooth Communication

- Easy data transfer via wireless bluetooth
- Wireless range up to 32 ft (10m)
- No more cables required

Hazardous Area Location Certified

- Intrinsically safe (IECEx/ATEX/CSA_{US})
- Certified for use in Class I, Zone 0
- NEMA 4X IP66 Rated Enclosure



ER-200 Specifications

Operating Temperature	-40°F to +158°F (-40°C to +70°C)	
Data Storage	For ER Probe Measurements: Most recent 2048 measurements For ER Temperature Probe Measurements: Most recent 1024 measurements	
Typical Battery Life	Typical: 1.9 years at 1 measurement every 4 hours	
Probe Channel Cables	Ten foot probe cable included (contact factory if alternate length is Necessary), 250 ft maximum	
Weight	5 lbs (2.3 kg)	
BT	- Roaming Details: Range: 32 ft. (10m), line of sight - Communications: Class Bluetooth v2.0	- Applications: FCC/IC/CE - Antenna: Integrated 2 dBi typical, 4 dBi maximum
Enclosure	Fiberglass Polyester NEMA 4X, IP 66 or stainless steel NEMA 4X, IP66. Stainless steel enclosure has female type connector for customer supplied < 8 dBi antenna*	
Compatibility	All Cosasco ER Probes	

*Stainless steel enclosure also available (NEMA 4X, IP 66), with RF connector connecting to customer supplied antenna for better Bluetooth connection.

— Hazardous Area Certifications

Atex Certification

SIRA 16 ATEX 2024X
Class I, Zone 0, Ex ia IIC T4 Ga, Ta = -40°C to +70°C
For use only with battery pack P/N 726043

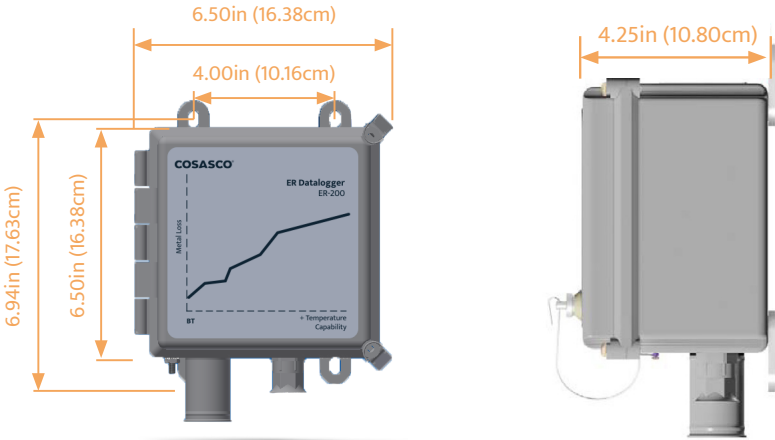
IEC Ex Certification

IECEX SIR 16.0009X
Class I, Zone 0, Ex ia IIC T4 Ga, Ta = -40°C to +70°C
For use only with battery pack P/N 726043

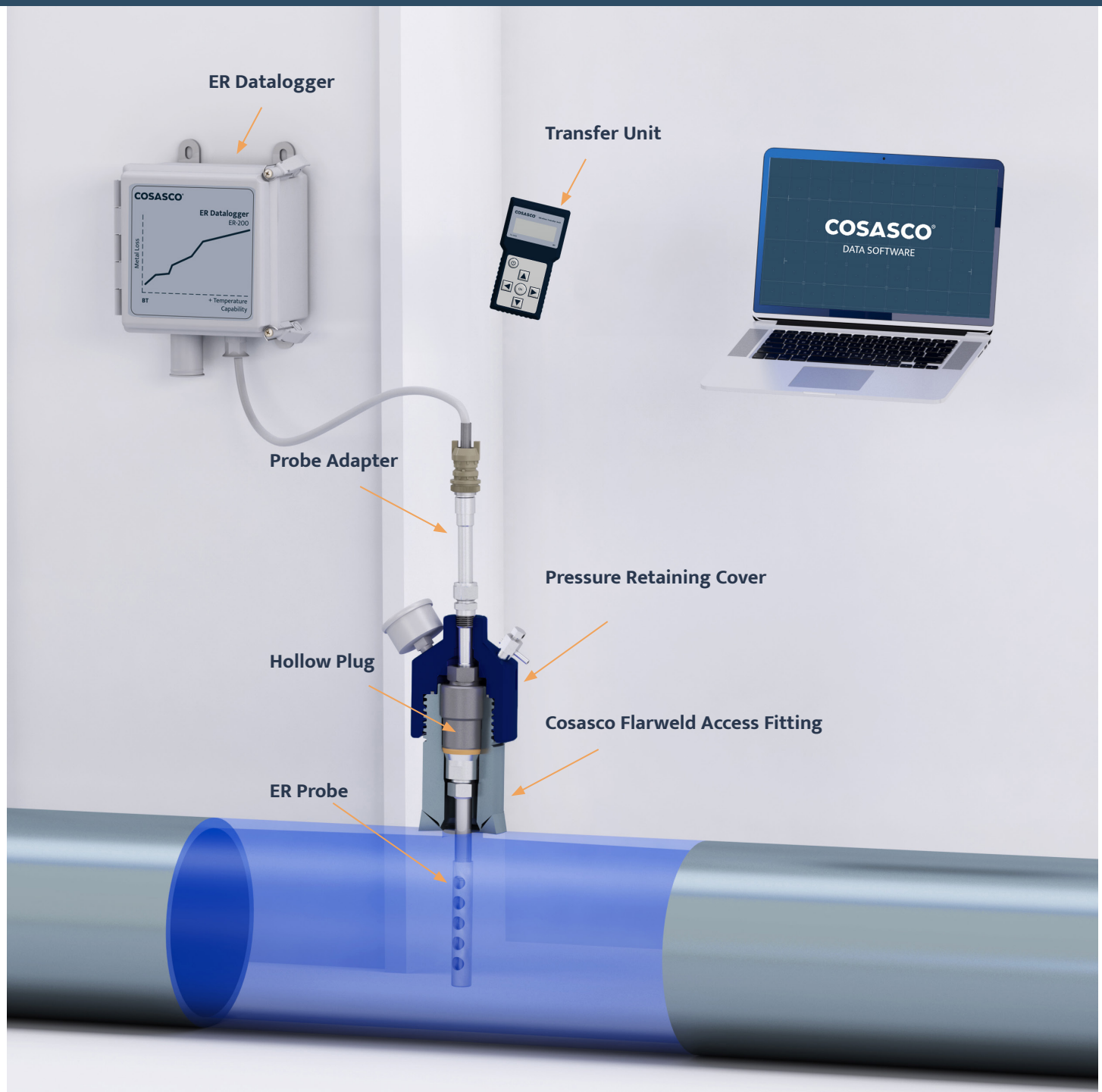
North American Certifications

CSA Certification: 70008419
CSAUS AEx ia IIC T4 Ga, Class I, Zone 0, Ta = -40°C to +70°C
CCSA Ex ia IIC T4 Ga, Class I, Zone 0, Ta = -40°C to +70°C
Use only replaceable battery pack Cosasco PN 726043

ER-200
Dimensions



Typical System-High Pressure

**ER Corrosion Monitoring Point:
High Pressure (up to 6000 psi)**

The above diagram shows the equipment required for a typical high pressure corrosion monitoring point using electrical resistance measurement technology. A typical ER Datalogging system consists of an ER probe and probe adapter connected to a hollow plug and inserted into a Cosasco Access Fitting that has

been welded onto the pipeline. The ER probe can be installed and retrieved under full operating pressure using a Cosasco Retriever and Service Valve. The TU-500 Transfer Unit communicates wirelessly with the ER-200 to download recorded Corrosion Rate readings. Collected readings on the TU-500 can be downloaded wirelessly to a PC running Cosasco Data off-line Software for graphing and analysis.

TU-500 Specifications

Compatibility	- All ER and LPR Dataloggers - MICROCOR® ER Datalogger - ER and LPR Probe Readers - All legacy ER and LPR Remote Data Collectors and MICROCOR® ER Dataloggers	
Memory	Microcor ID's 1-99 and all other ID's 1-255	
Power Source	2 AA Lithium Batteries: P/N 095820, alternate P/N 095818 (do not mix)	
Battery Life	1000 sets of data, typical	
Display	Four Line Liquid Crystal Display (LCD)	
Temperature Range	Operating: -40°F to 158°F (-40°C to 70°C)	Storage: -40°F to 158°F (-40°C to 70°C)
Enclosure	IP20 rated enclosure with sealed membrane keypad	
Dimensions	6.24"H x 3.35"W x .91"D (15.8 x 8.51 x 2.31 cm)	
Wireless Communication	Range: 12m (40ft), line of sight Approvals: FCC/IC/CE ₀₅₃₉	Antenna: Integrated 2 dBi typical, 4 dBi max

Certifications

ATEX Certification
SIRA 14 ATEX 2263X
Ex ia IIC T4 Ga,
Ta = -40°C to+70°C

IECEX Certification
IECEX SIR 14.0096X
Ex ia IIC T4 Ga, Ta = -40°C to+70°C

North American Certifications
CSA Certification: 70007061
CSA_{US} Class I, Zone 0, AEx ia IIC T4 Ga,
Ta = -40°C to+70°C
CSA Ex ia IIC T4 Ga, Ta = -40°C to+70°C

TU-500 Dimensions



Ordering Information ER-200

Model	Description					
ER-200	Electrical Resistance Datalogger (Includes batteries and user manual) *					
	Code	Enclosed Material				
	0	Standard Fiberglass Enclosure				
		Code	Antenna Option			
		0	No External Antenna			
			Code	Cable Length in Feet (omit for standard 10 foot cable)		
			A	Type A Connector		
			B	Type B Connector		
			S	Type S Connector		
				Code	Cable Length in Feet	
				L	**Length in Feet (Standard 10 Feet)	
ER-200	1	0	A	10	← Example	

* Installation Kit for ER not included

** Maximum cable length is 250 ft.

Accessories and Replacement Parts

Model	Description
TU-500-1	Transfer Unit, Batteries, and User Manual

Accessories and Replacement Parts

Part Number	Description
095820	AA lithium Battery for TU-500
028068	Fixed Probe Adapter (only for High Pressure Series 4000 Probes)
700689	ER Test Probe
402207	Mounting bracket assembly for 2” OD pipe (pipe not included)
726080-DL-BT-1-0	Installation Kit ER-200 BT (Includes test probe and Cosasco Offline Software)
726043	Battery pack assembly 2X Lithium D Size for Datalogger units

Cosasco

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Rohrbach Cosasco Systems Corrosion Monitoring Equipment is manufactured and sold under one or more of the following US Patents: 4138878, 4238298, 4338563, 4514681, 4537071, 4587479, 4605626, 4625557, 4755744, 4839580, 4841787, 4882537 5243297.



Certificate No. BSI 10694



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