Model MS2700E

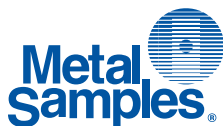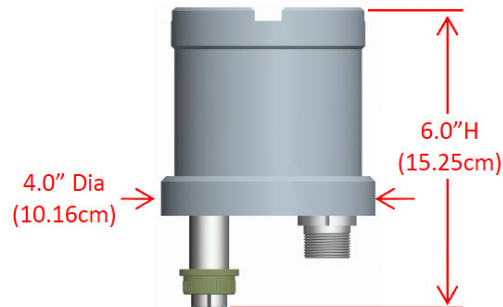## High Resolution ER Transmitter
RS-485 Modbus Output

Metal Samples' new compact MS2700E ER Transmitter measures all types of electrical resistance (ER) corrosion probes. The new high-resolution, 16-bit measurement provides faster response, obtaining corrosion rates in hours instead of days. The transmitter can be remote or direct-mounted (shown).

The transmitter is available in a weather-proof (IP66) stainless steel enclosure designed for applications which do not permit aluminum enclosures (such as offshore environments or Zone 0 hazardous areas). Alternatively, a weather-proof (IP66) and explosion proof cast aluminum enclosure is also available.

MS2700E direct mounted to a retrievable probe

The MS2700E transmitter offers simple installation and robust RS-485 Modbus communication, allowing up to 32 units to be connected in series (daisy-chained) on a single line. Setup is also simple, using a set of switches to select the probe type to be measured, address, and other options.

4.0" Dia (10.16cm)

6.0"H (15.25cm)

Technical Specifications

Model
MS2700E - High Resolution ER RS-485 Modbus Transmitter

Physical Data
Instrument Weight:	3.70 lb. (1.68 Kg)
Total Weight w/ Accessories:	5.76 lb. (2.61 Kg)
Instrument Dimensions:	6.0"H x 4.0"Dia (15.25cm H x 10.16cm Dia)

Operating Temperature:	-4° to 158°F (-20° to 70°C)
Storage Temperature:	-40° to 176°F (-40° to 80°C)
Enclosure Material:	316 Stainless Steel
Enclosure Rating:	IP66
Mounting Specifications:	Direct probe mount (standard) May be pole mounted using optional hardware (Up to a 2.5" (6.35cm) Dia. pole)

Performance Data
Measurement Type:	ER measurement using any standard ER probe type (Wire Loop, Tube Loop, Cylindrical, Flush, Strip, etc.)
Range:	0-100% of probe life
Resolution:	0.0015% of Probe Life (16-bit)
Cycle Time:	75 Seconds

Electrical Data
Power Requirements:	10 to 28 VDC
Maximum Probe Cable Distance:	30 ft (9.1 m)
Output Specifications:	RS-485 Modbus, RTU or ASCII Protocol (Switch Selectable) 2400 / 4800 / 9600 / 19.2K Selectable Baud 32 Maximum Units (Addresses 1 to 32)

Hazardous Location Certifications – Intrinsic Safety
USA / Canada	Conforms to ANSI/UL Std. 60079-0, 60079-11, 61010-1 CAN/CSA Std. E66079-0, E60079-11 & CAN/CSA C22.2 No. 61010-1 Class I, Zone0, AEx ia IIC T4 Ga Zone 20, AEx ia IIIC T130° C Da -20° C ≤ Ta ≤ +70° C
Europe and Worldwide (ATEX and IECEx)	II 1 G Ex ia IIC T4 Ga II 1 D Ex ia IIIC T130°C Da - 20°C ≤ Ta ≤ + 70°C ATEX Certificate No: **ITS14ATEX28092X** IECEx Certificate No: **IECEx ITS 14.0052X**

X - see Special Conditions in Operator's Manual.

Included Accessories
33' (10M) Wiring Harness, Meter Prover, Operations Manual

Optional Accessories
Probe Extension Cable, Remote Mounting Hardware