

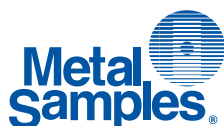
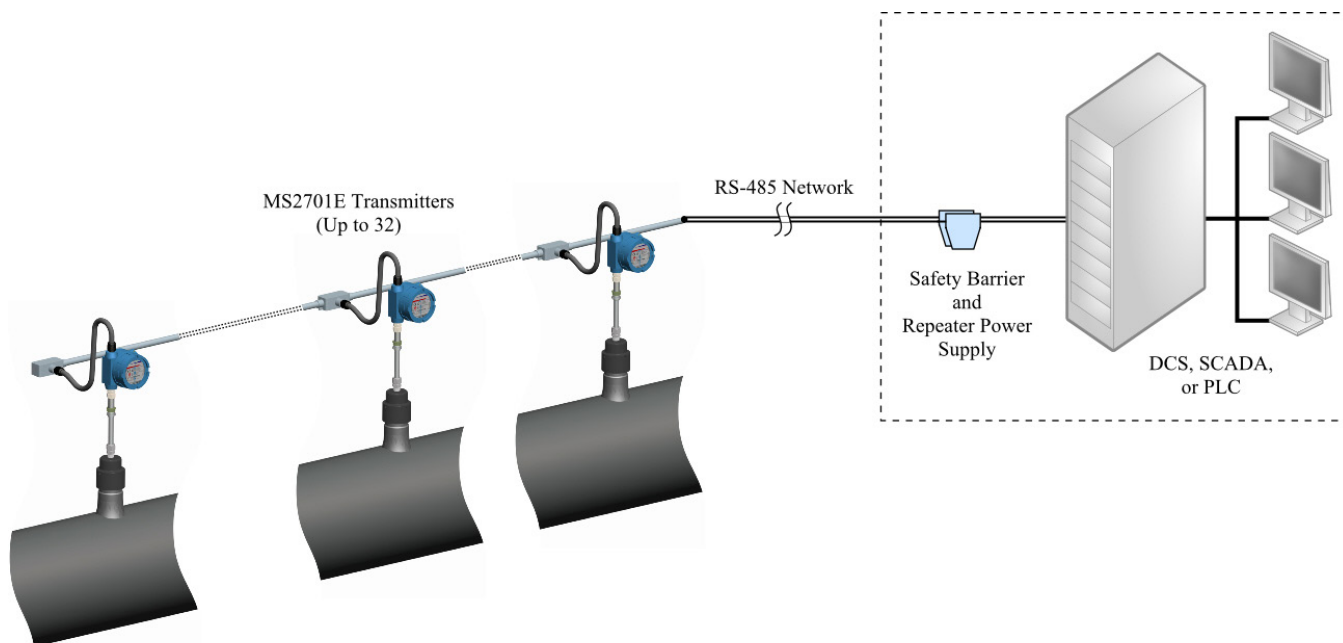
Model MS2701E

High Resolution ER Transmitter RS-485 Modbus Output

Metal Samples' new compact MS2701E 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 is provided in a weather-proof (IP 66 / NEMA-4X) and explosion proof cast aluminum enclosure. It is designed to be mounted directly to the probe, but can also be mounted nearby using the optional mounting kit and a customer-supplied mounting pole.

The MS2701E 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.



Metal Samples Company

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Technical Specifications

Model

MS2701E - High Resolution ER RS-485 Modbus Transmitter, Direct Mount

MS2701E-XX* - High Resolution ER RS-485 Modbus Transmitter, Remote Mount

*XX = Cable length in feet, up to 30 feet maximum, in 5 foot increments.

Physical Data

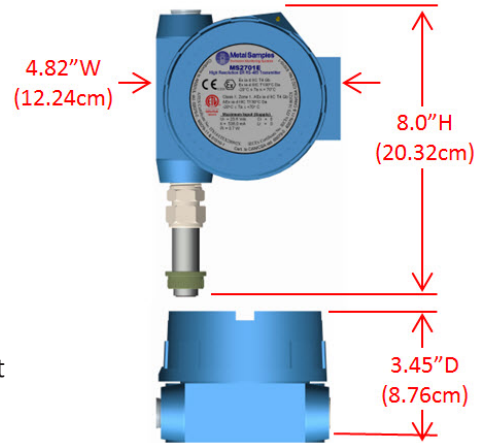
Instrument Weight: 3.70 lb. (1.68 Kg)
Total Weight w/ Accessories: 5.76 lb. (2.61 Kg)
Instrument Dimensions: 8.0"H x 4.82"W x 3.45"D
(20.32cm H x 12.24cm W x 8.76cm D)

Operating Temperature: -40° to 158°F (-40° to 70°C)

Storage Temperature: -40° to 176°F (-40° to 80°C)

Enclosure Material: Cast Aluminum (Copper-Free)

Mounting Specifications: Direct probe mount or Remote Mount
(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: 90 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

Europe and Worldwide (ATEX and IECEx) II 2(1) G Ex db [ia Ga] IIC T6...T4 Gb
II 2(1) D Ex tb [ia Da] IIIC T80°C Db
- 40°C ≤ Ta ≤ + 70°C
ATEX Certificate No: **ITS18ATEX2203437X**
IECEx Certificate No: **IECEx ETL 18.0020X**

X - see Special Conditions in Operator's Manual.

Hazardous Location Certifications - Enclosure

Case Specifications: Explosion Proof (FM, CSA, CNELEC, UL)
IP 66, NEMA 4X, 7BCD, 9EFG

Included Accessories (Direct-Mount Model)

Meter Prover, Operations Manual

Included Accessories (Remote-Mount Model)

Meter Prover, Operations Manual, Probe Cable, Mounting Hardware Kit