

# Model MS2801E

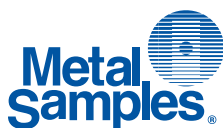
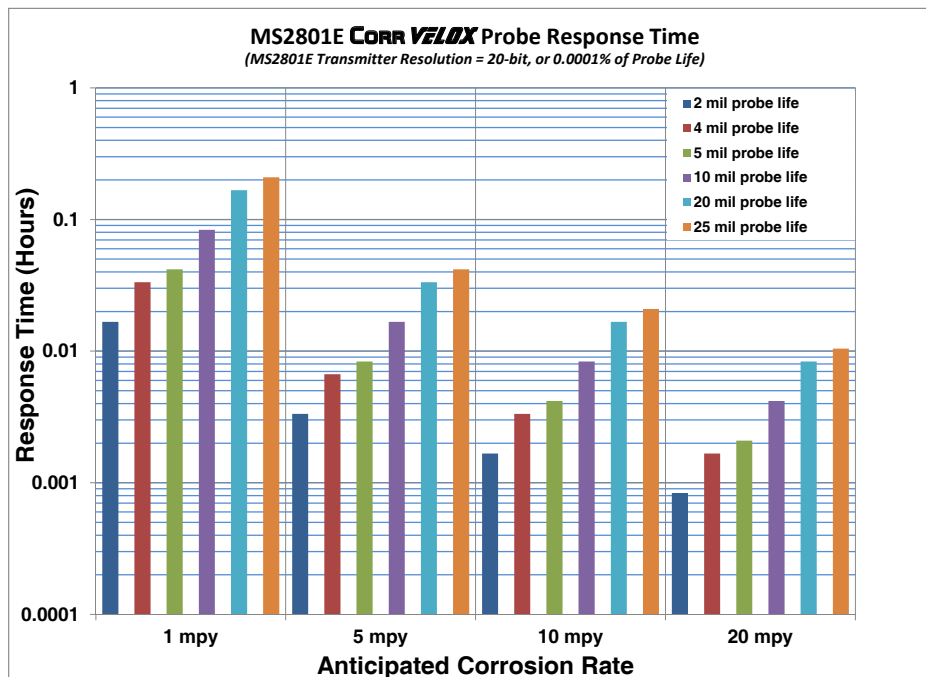
**CORR VELOX**

## Ultra Resolution ER Transmitter RS-485 Modbus Output

Metal Samples' new compact MS2801E **CORR VELOX** ER Transmitter measures all types of electrical resistance (ER) corrosion probes. The ultra high-resolution, 20-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 **CORR VELOX** 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

MS2801E-00YY - **CORR VELOX** Ultra-High Resolution ER RS-485 Modbus Transmitter, Direct Mount  
MS2801E-XXYY - **CORR VELOX** Ultra-High Resolution ER RS-485 Modbus Transmitter, Remote Mount

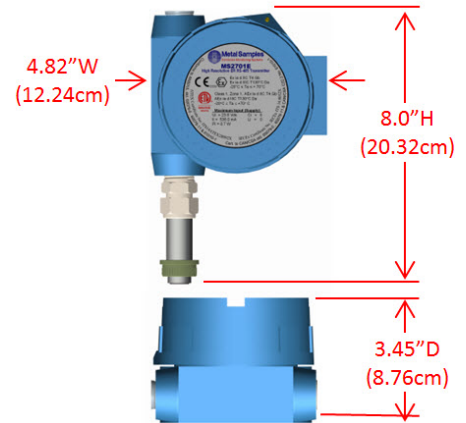
XX = Cable length in feet, up to 30 feet maximum, in 5-foot increments.

YY = Enclosure type (00 = Aluminum (standard), 01 = Stainless Steel)

## 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 (-20° 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  
Range: 0-100% of probe life  
Resolution: 0.0001% of Probe Life (20-bit)  
Cycle Time: 75 Seconds

## Electrical Data

Power Requirements: 10 to 30 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 – Transmitter

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, CENELEC, 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