

Model MS2900E

High Resolution ER Transmitter 4-20 mA / HART Output

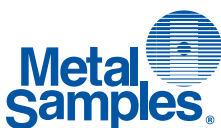
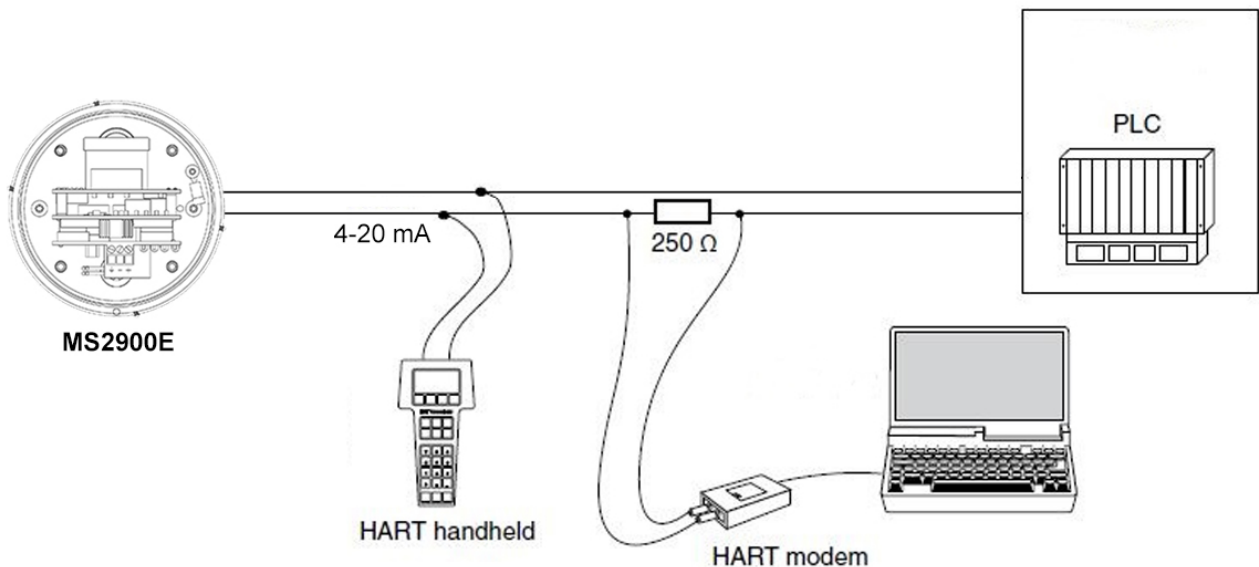
Metal Samples' new compact MS2900E ER Transmitter (ERT) measures all types of electrical resistance (ER) corrosion probes using state-of-the-art algorithms and data analysis. The new high-resolution, 16-bit measurement provides faster response, obtaining corrosion rates in hours instead of days. Metal loss gets updated and transmitted after each measurement cycle in the form of 4-20mA /HART signal.

The transmitter is provided in a weather-proof (IP 66) stainless steel enclosure designed for applications which do not permit aluminum enclosures (such as offshore environments or Zone 0 hazardous areas).

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 MS2900E is completely loop-powered, so installation is simple. A two-wire connection is all that is required for both instrument power and data transmission. Setup is also simple, using a set of switches to select the probe type to be measured.



Metal Samples Company

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Technical Specifications

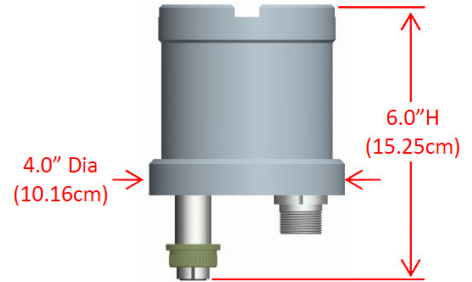
Model

MS2900E - High Resolution ER 4-20mA HART 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: -40° to 158°F (-40° 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: ~1 Minute

Electrical Data

Power Requirements: 11 to 28 VDC
Maximum Probe Cable Distance: 30 ft (9.1 m)

Output Data

Output Signal: 4-20mA output with HART protocol
Alarm Signal: - Current Output Configurable
- Digital interface
Load: - min. 250 Ohms for HART Communication

Hazardous Location Certifications – Intrinsic Safety

Europe and Worldwide
(ATEX and IECEx) II 1 G Ex ia IIC T4 Ga
- 40°C ≤ Tamb ≤ + 70°C
Ex ia IIC T4 Ga
- 40°C ≤ Tamb ≤ + 70°C

ATEX Certificate No: **ITS14ATEX27981X**
IECEx Certificate No: **IECEx ITS 14.0010X**

USA and Canada
(ETL) Ex ia IIC T4 Ga
Class I, Division 1, Groups A, B, C & D, T4
Class I, Zone0, AEx ia IIC T4 Ga
-40° C ≤ Ta ≤ +70° C

Included Accessories

33' (10 meters) Current Loop Wiring Harness, Meter Prover, Operations Manual

Optional Accessories

Probe Extension Cable, Remote Mounting Hardware