

2880-OWI / 2881-OWI / 2882-OWI Oil/Water Interface Transmitter



Reliable monitoring of oil/water interface and emulsions

Over 40 years of capacitance experience stands behind the 2880-OWI transmitter. The sensing probe continuously monitors the capacitance of the inserted probe. As the interface or emulsion layer (rag layer) crosses over the probe, a proportional 4-20 mA output is provided. Typical applications include oil water separators, oil/water knock-out tanks, treater trains and decanting tanks.

- capacitance technology does not foul or require cleaning
- no moving parts
- remote monitor mounts safely away from the process

The 2880-OWI sensing probe monitors the capacitance field around the probe. A calibration is performed against the an oil condition and a water condition. The active portion of the probe is fully submerged into the liquid and sized to your targeted range of interest. As the oil/water interface or emulsion crosses or envelopes the probe, the capacitance change is tracked and an output of 4-20 mA is provided.

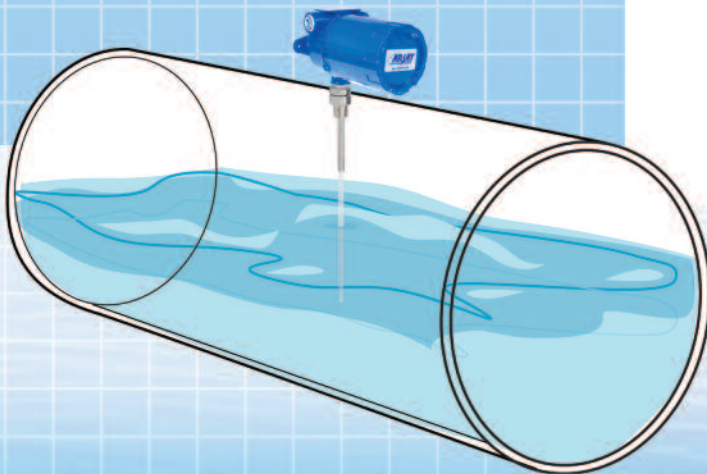


power input
4-20 mA / RS-485 Modbus

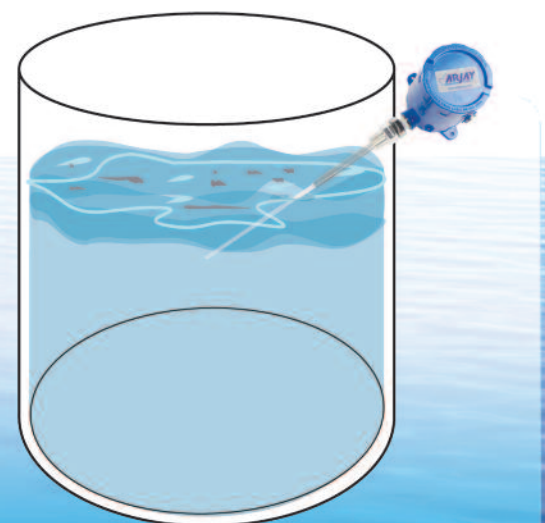
optional explosion proof probe

3/4" npt 316SS process connection on standard probes (flanges optional)

Inactive probe Sheath (length to order)



Teflon coated probe (length to order)



2880-OWI

Features and Benefits

- no moving parts
- electronics is integral to the probe
- high corrosion resistant Teflon and stainless steel wetted parts
- capacitance technology responds to all oil types
- HF capacitance technology does not require routine cleaning
- easy calibration and control set-up

Technical Specifications - Electronics

Operating Temp. -20°C to +55°C
Resolution .04 pF at 1,000 pF
Accuracy 0.2% of full scale pF
Power Input 12 vdc or 24 vdc, 0.1 amp max.
100-240 vac +/- 10%
Communication RS-485 Modbus

Control Interface

2880-OWI 0/4-20 mA non-isolated output
2881-OWI 0/4-20 mA isolated output
2882-OWI 0/4-20 mA non-isolated and two independent 3 amp SPDT dry relay contacts

Technical Specifications - Probe

Process Temp. -60°C to +260°C (Teflon probe)
Pressure 103 bar/10342 kPA/1500psi
at stable temperature
Wetted Parts 316SS and Teflon

The electronics for this model can be mounted remote from the probe. For a remote controller in a Hazardous Location see the Model 2880R-OWI. For a remote controller in an Ordinary Location, see the model 2852-OWI.

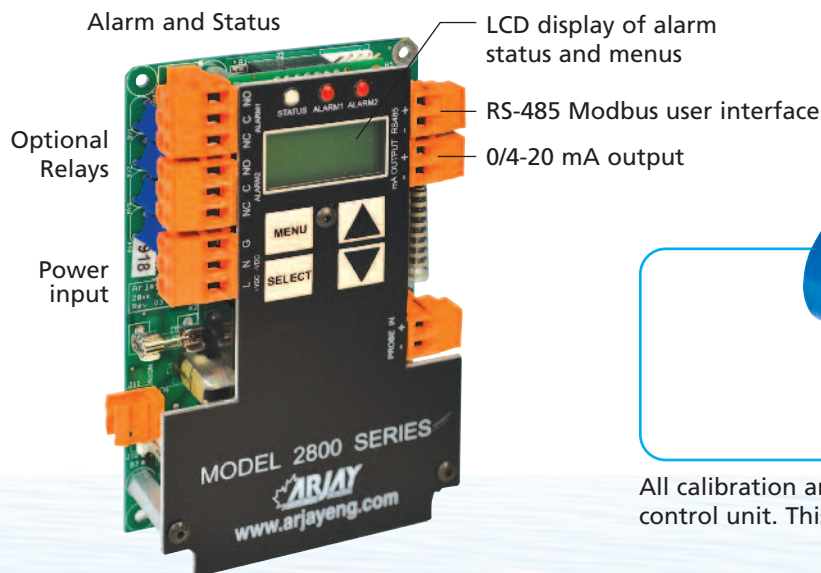
Certifications (certificates available on website)

Included Standard on Control Unit and Probe - Ordinary Location Use
UL/CSA/IEC 61010-1
CAN/CSA 22.2
CE

Optional Hazardous Location Use - Explosion Proof
USA/Canada Zone 1,2; AEx db IIC T5 Gb
IECEX/ATEX Zone 1,2; Ex db IIC T5 Gb

Also included Standard on Probe
CRN # 0F07450.2 (all provinces)
NACE MR-0175 Compliant where applicable

Optional Viewing window of % Level LCD



All calibration and power wiring is done at the main control unit. This is mounted directly onto the probe.



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