

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.

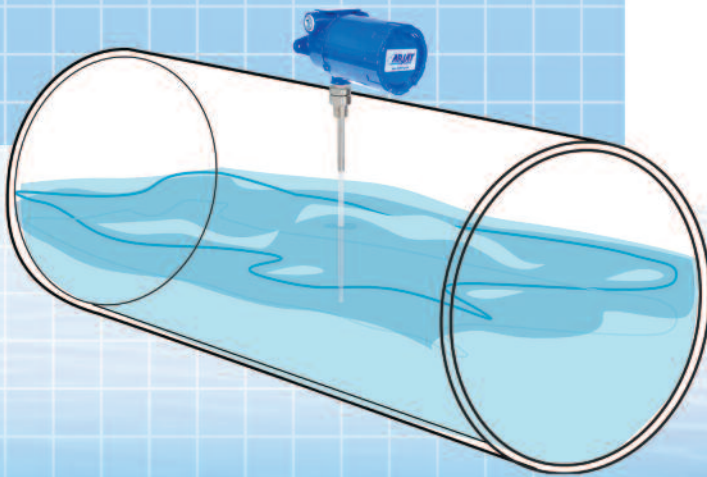


power input
4-20 mA / RS-485 Modbus

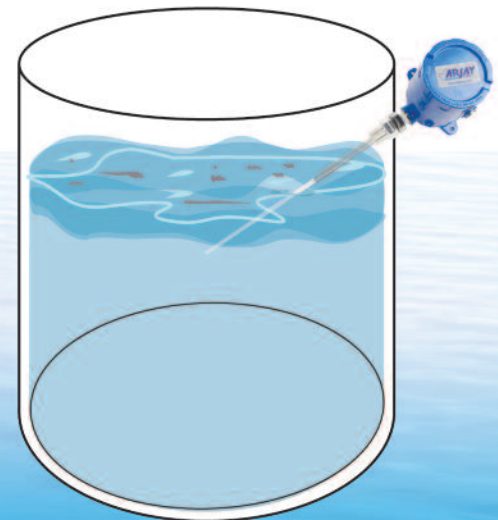
optional explosion proof probe

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 .007% (.07 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.

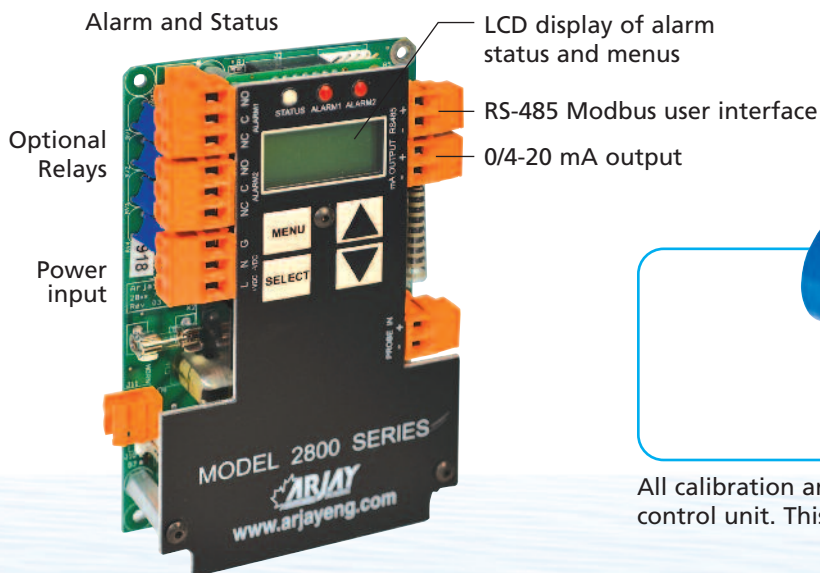
Certifications (certificates available on website)

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.



Arjay Engineering Ltd. 2851 Brighton Road Oakville, Ontario Canada L6H 6C9

http://www.arjayeng.com telephone: +1 905-829-2418 N. America toll free: 1-800-387-9487 fax: +1 905-829-4701

