

Innovation Born from Experience

Electrolab Introduces the OPTIFLEX 7200E Guided Wave Radar Level Sensor

Since 1976, Electrolab has been a trusted name in delivering reliable, field-proven continuous liquid level measurement for the energy sector. We are proud to announce a strategic partnership with KROHNE, a global leader in precision measurement technologies, and e9 Treatments, a worldwide leader in innovative asset protection.

This collaboration leverages Electrolab's extensive application expertise, with KROHNE's best-in-class design capabilities, and e9 Treatments' advanced nanoscale surface modification technology to deliver the next evolution in Guided Wave Radar (GWR).

The result? A sensor engineered for excellence—delivering unmatched quality, precision, and performance you can count on, even in the most demanding environments. This GWR offers:

- » Highly accurate level measurement in complex media and process conditions
- » Proven reliability and durability with minimal maintenance and long service life
- » Ease of installation and servicing
- » Unique, out of the box, e9 treated probe (cable or rod) for paraffin/buildup resistance



FEATURES

- Liquid level and interface measurement
- Distinctive “Snapshot” feature (see page 2 for details)
- Unique, quick-connect process fitting allows disconnect of housing under process conditions, for quick, easy maintenance
- Single- or double-ceramic process seal system for demanding conditions
- Remote housing options
- Built-in display on housing for ease of installation and setup, 360-degree rotatable
- Quick auto setup from the display housing
- 2-wire, 4-20mA (HART® 7), optional Modbus communication
- Accuracy +/-2mm (+/- 0.08")
- Cold weather power management, display shuts off at -20° C, remains operational to -50° C
- Cable lengths up to 51 ft.; custom cut to length in the field
- Dielectric constants as low as 1.3

SPECIFICATIONS

OPTIFLEX 7200E	
Technology	Guided wave radar level transmitter based on Time Domain Reflectometry (TDR) technology
Application	For liquids in storage and process applications, reactors and pressure vessels. Ideal for upstream production tanks & separators, midstream collection tanks, chemical storage and more!
Dielectric Constant	≥1.3 (TBF 1.1)
Measurement Range	0.3-60 m/0.98-196.85 ft
Accuracy	±2 mm/±0.08"
Repeatability	±1 mm/±0.04"
Interface	Yes
Housing Material	Polyester-coated Aluminum, 316L (with or without display)
Remote Housing	Optional. Designed for viewing level up to 100m/328 ft from probe
Ingress Protection	IP66/IP68, NEMA 4x/6P
Probe Type	Single cable 316/316L or rod: 08mm/0.32"
Probe Treatment	e9 treated to resist paraffin and buildup (standard) With or without e9 Dual Protect™, which adds an outer FEP sleeve for use in harsh environments
Process Connection	Threaded: 1" NPT
Weight	316L, Standard Wt: 20 mm x 100mm 0.25 kg (0.55 lb) Heavier wt: 40 mm x 100mm 1 kg (2.2 lb)
Gasket	PTFE process seal with FKM/FPM gasket, Ceramic process seal with FKM/FPM gasket
Ambient Temp.	-40-+80°C/-40-+176°F; Integrated LCD display: -20 to +60°C
Process Temp.	-40-+150°C/-40-+302°F; Option for -40-+200°C/-40-+392°F
Process Pressure	-1-40 barg/-14.5-580 psig; Option for -14-1450 psig
Power Supply	11.5-30 V DC (Exi), 13.5-34 V DC (Exd), 2-wire
Output	1 x 2 Wire 4-20 mA passive (HART® 7); Option for 2 x 2 Wire 4-20 mA passive (HART® 7) plus second output (4-20 mA or relay; Optional HART to Modbus Translator (RS-485 Interface)
Approvals	ATEX, IECEX, cQPSus, NEPSI, INMETRO, NACE, ASME B31.1, CE, EAC, NAMUR

ADDITIONAL BENEFITS

Snapshot Ensures Data Accuracy

The "Snapshot" feature of the OPTIFLEX 7200E is a valuable tool for preventing false measurements caused by activity above the liquid surface. This function is useful during initial setup (commissioning) and for ongoing analysis.

"Snapshot" works by creating a baseline map of the tank's interior above the liquid level during stable, normal conditions. Once this map is recorded, the system will ignore any unusual signals or anomalies it detects. This filtering of irregular signals ensures that the measurements remain accurate and reliable, leading to more consistent data and fewer false alarms.

Electrolab Family of OPTIFLEX 7200E GWR Level Sensors



OPTIFLEX 7200E-D
With Display



OPTIFLEX 7200E-ND
No Display



OPTIFLEX 7200E-RD
Remote Display

(shown with rod option for probe)