

## 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     | Treated with e9 Treatments to resist paraffin and other buildup (option for PTFE treated cable)                                                                                          |
| Process Connection  | Threaded: 1" NPT                                                                                                                                                                         |
| 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



(shown with rod option for probe)

OPTIFLEX 7200E-RD  
Remote Display