

Smart
Sensor

TD-120

Turner Designs Hydrocarbon Instruments has been the world leader in oil in water monitoring for more than 20 years. The TD-120 Oil in Water Monitor was developed based on our extensive real-world experience and offers UV fluorescence technology with industry leading features. The TD-120 is available with either a standard care package or custom care package to match the needs of your site conditions and application. The customer care packages include calibration to known standards or calibration to your target hydrocarbon, using sample analysis—making your installation and start-up process trouble free. The TD-120 is ideal for detection of oil leaks and spills for heat exchangers, boilers, and membrane systems as well as optimization of water treatment systems.

With low detection limits and greatly extended detection range, the TD-120 provides the necessary tools and ease of use to meet today's complex oil in water needs.

FEATURES

- Internal tablet interface for quick setup and calibration
- New auto-valve capabilities: temperature protection, fresh water flush, and process isolation
- Minimal maintenance
- Low cost of ownership—no reagents or instrument air needed for operation
- OEM opportunities

 **TURNER DESIGNS**
Hydrocarbon Instruments

OIL IN WATER MONITOR



Simple
Accurate
Reliable



TD-120

OIL IN WATER MONITOR

S P E C I F I C A T I O N S

Applications	Steam condensate, boiler feed water, cooling water, intake protection, dam sumps, process optimization
Hydrocarbons	Diesel, fuel oil, crude oil, gasoline, jet fuel, lubricating oils, phenol, heat transfer fluids, aromatic chemicals
Detection Range	Low PPB–6000 PPM (range is dependent on oil solubility in water and background)
Dimensions (Wall Mount)	16" H x 20" W x 5.5" D (406 mm x 508 mm x 140 mm)
Weight	24 lbs (10.9 kg)
Local Color Display	PPM, PPB, or raw signal
Controls	External touch pad for events, history log, and maintenance, with internal tablet for configuration and calibration
Power Requirement	100–240 VAC 50/60 Hz, 1.3 A max 1 phase, neutral or hot (inrush current not to exceed 40 A max)
Communications	4–20 mA isolated, selectable loop or instrument powered Optional: HART
Alarms	4x dry contact user configurable alarms: Early, High, System, Cell Condition, High Temperature
Plumbing Requirements	Feed 1/4" tube, Return 1/4" tube, Flush 1/4" tube
Sample Inlet	10–100 psig (69-690 kPag)—for higher pressures consult factory
Sample Temperature	32–122 °F (0–50 °C)—for higher temperatures consult factory
Ambient Operating Temperature	32–131 °F (0–55 °C)
Flow Rate	Limits: 0.03–0.79 US gallons/min (0.1–3L/min) Recommended: 0.26–0.52 gallons/min (1–2L/min) optional sample pump available
Operational Principle	UV Fluorescence
Response Time	3 seconds default (user adjustable, down to 0.5 seconds), continuous reading
Calibration Stability	+/- 10% over 12 months or better
Certification	EN 61010-1:2010 and EN 61326-1:2013 CAN/CSA-C22.2 No. 61010-1:2012 + UPD No. 1:2015-07

#1 Worldwide
for process and environmental
oil in water monitors



TURNER DESIGNS
Hydrocarbon Instruments

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