

# TD-4100XD

## HYDROCARBONS IN WATER



**Now available with standard E09 Electronics Package:**

The TD-4100 XDC is a "Closed Cell" version of the rugged, world industry standard TD-4100 XD Oil in Water Monitor. It was designed for normally clean water applications or dirty water applications where fouling can be controlled by chemical injection or optional on-board cleaning systems. It utilizes a clear tube flow cell to contain the sample water at pressure to prevent oxygen contamination in steam systems and to return the sample to the process at pressure. It uses a unique internal Cell Condition Monitor to alert operations of the need for cleaning or to trigger the optional on-board cleaning system. As with all Turner monitors it includes a field validation method.

**Unique features:**

- Fluorescence measurement technology with lowest detection limits available
- Minimal sample conditioning plumbing hardware reduces cost
- Easy calibration with long term stability
- Low maintenance
- User friendly, E09 Electronics Package
- Ruggedized for harsh environments, non-hazardous areas
- Custom configurations, and wetted materials



# TD-4100XD

## SPECIFICATIONS



Applications	Steam Condensate, Boiler Feed, Normally Clean Water, Cooling Water, Intake Protection and Dirty Water with Chemical cleaning if needed
Hydrocarbons	Fuel Oil, Crude Oil, Other Fuels and Lubricating Oils, Phenol, Styrene, Most Heat Transfer Fluids, Aromatic Chemicals, BTEX
Detection Range	Fuel Oil, Crude Oil 5 ppb-500 ppm in steam condensate
Low Detection Limit	Most Other Hydrocarbons <50 ppb
Dimensions	Incl. Wall Mounting: 25" H x 44" W x 12.5" D (635 mm x 1118 mm x 318 mm) Incl. Floor Mounting: 68.4" H x 25.7" W x 25.7" D (1737 mm x 653 mm x 653 mm)
Weight	Floor Mount: 173 lbs (78.5 kg)
Local Display	Yes, PPM, PPB, or Raw Signal
Controls	External 316 SS Touch Pad
Power Requirement	90 - 240 VAC, 50/60 Hz +/- 10%, 184 W, 1 ph, (24 VDC Optional)
Plumbing Requirements	Feed: 3/8" or 1/2" Tube, Return: 3/8" or 1/2" Tube
Sample Pressure	<100 psig (689 kPag) (For higher pressures consult factory)
Sample Temperature	140 °F, (60 °C) (For higher temperatures consult factory)
Ambient Temperature	-4 to 131 °F (-20 to 55 °C) (Heater or Vortex Cooler Optional)
Required Inst. Air Supply Zone I, Zone II	22 SCFH (0.62 m3/hr)
Flow Cell Characteristic	Closed Tube with Internal Cell Condition Monitor
Pressurized Sample Return	Yes
Operational Principle	UV Fluorescence with application specific optical configurations
Calibration Stability	+/- 10% over 6 Months or better
Response Time	3 seconds full scale spike change, continuous reading
Calibration	Multiple-point linear or non-linear, or uncalibrated. Holds two calibrations (one for each sample steam).
Field Validation	Via factory supplied water soluble dye or site prepared standard with hydrocarbons
Reagents	(For dirty water applications, a cleaning solution may be required)
Alarms	Early Warning / High Alarm / Cell Condition / Cleaning In Process
Alarm Contacts	Four user-settable, independently-protected dry contact relays
Communication	Standard E09 features with 4-20 mA isolated, 500 ohm impedance, selectable between Loop Powered and Instrument Powered, Ethernet. Optional HART, ModBus
Diagnostics	Self Diagnostics, internal failure linked to alarm, Cell Condition
Security	Password protects software, Lockable Enclosure 316 Stainless Steel
IP Rating	Electronics Cabinet 316 stainless steel, NEMA 4X, IP 66
Maintenance	Calibration check, clean flow cell
Hazardous Area Options:	North America: Class I Division 1, Class I Division 2, Groups B, C, D, T4; ATEX and IECEx: Class I Zone 1, Zone 2, other international codes.
Sample Pump	Optional
Cleaning System	Optional
Data Logger	Standard - see E09 Data Sheet
Certifications	IMO 107 (49), 9001: 2008 Quality System



**#1 Worldwide**  
For Process & Environmental  
Oil In Water Monitors

**TURNER DESIGNS**  
Hydrocarbon Instruments

2023 N. Gateway Blvd., Suite 101  
Fresno, California 93727 USA

**TEL: 559 253 1414**

FAX: 559 253 1090

sales@oilinwatermonitors.com

www.oilinwatermonitors.com

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