Laser Diagnostic Instruments

LDI ROW

REMOTE OPTICAL WATCHER

The ROW is an autonomous non-contact sensor for the detection of oil on water. It monitors industrial sites for oil spills and leaks so you can respond quickly. Protect drinking water sources and safe-guards heavy industrial equipment from lubricant ol leaks; protect the environment.

› 24/7 OPERTION EVEN IN HARSH ENVIRONMENTS

Day or night, in arctic cold or scorching heat, the ROW helps you pinpoint the pollutters, take action, and avoid lasting damage. The sensor is available in aluminum, stainless steel or ATEX EXD enclosures.

› LONG LIFE, GO OFF-GRID

Robust IP68 certified hermetic design and 5 year LED lifetime. Low power consumption of < 2W with optionl remote operation using solar panels, batteries and wireless telemetry.

› NON-CONTACT DETECTION INSTRUMENT

This means easier installation, no bio-fouling, and no maintenance.

› INDUSTRIAL LEADING SENSITIVITY

With almost 30 years of experience in R&D, LDI has created the ROW that uses UV LED light to excite oil's native fluorescence. The ROW's photo-optics can detect oil films down to 1 µm layer, while minimizing false alarms.
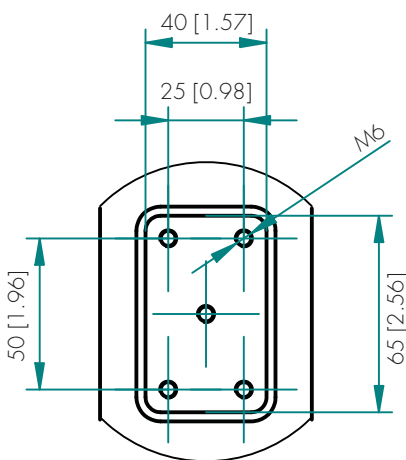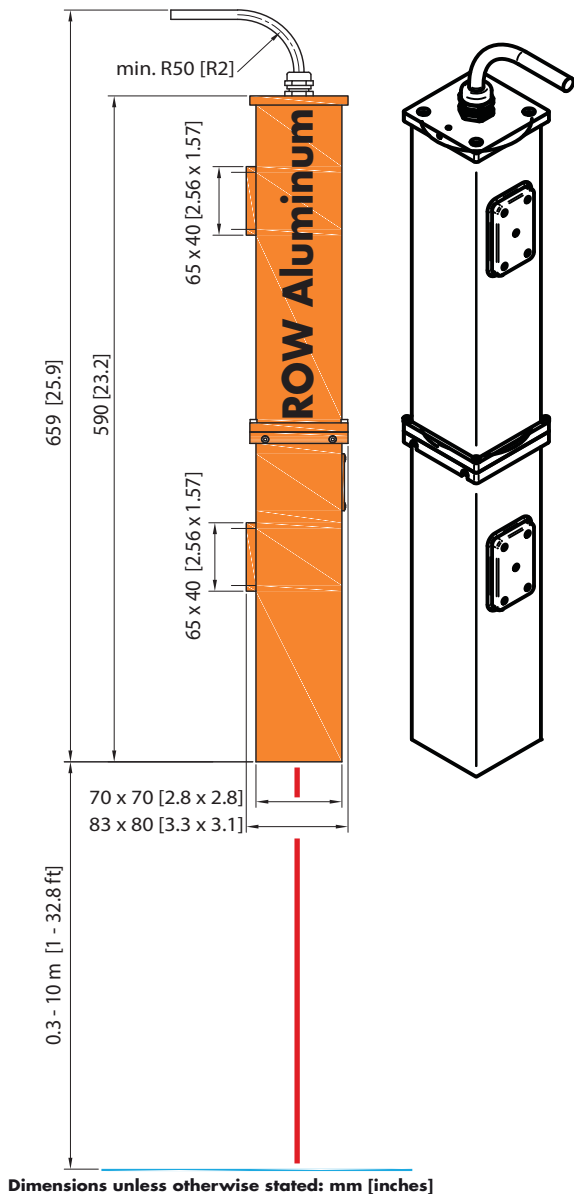
France, Sewer Monitoring

Estonia, Water Treatment Plant

South Korea, Municipal River Monitoring

Poland, Power Plant

LDI ROW

Optical non-contact and autonomous sensor for real-time detection of oil contamination - UV fluorescence technology

TECHNICAL SPECIFICATIONS

min. R50 [R2]

ROW Aluminum

659 [25.9]
590 [23.2]
65 x 40 [2.56 x 1.57]
65 x 40 [2.56 x 1.57]
70 x 70 [2.8 x 2.8]
83 x 80 [3.3 x 3.1]
0.3 - 10 m [1 - 32.8 ft]

Dimensions unless otherwise stated: mm [inches]

40 [1.57]
25 [0.98]
M6
50 [1.96]
65 [2.56]

MODEL	O-2311A **(Aluminum)**	
SENSITIVITY	> 1 µm (micron) oil film	
OIL DETECTION	Medium (diesel, lubricants etc..) & heavy (crude, bunker fuels etc..) oils	
RANGE	up to 10 m [33 ft] from surface	
OPERATION TEMPERATURE	-30°C to +60°C [-22°F to 140°F]	
ENCLOSURES	IP68, hermetically sealed, weather proof Anodised Aluminum, powder coating, purged (Ar)	
DIMENSIONS (L x W x H)	590 x 83 x 80 mm [23.2 x 3.3 x 3.1 in] device dimensions Comes with mounting plates for installation	
WEIGHT	1.8 kg [3.97 lbs]	
POWER OPTIONS (Input)	12 – 24 VDC (10V - 30V) as standard Optional: 110/220 VAC, 60/50 Hz AC/DC adapter, solar/battery options	
POWER USAGE	< 2 Watt (DC)	
LIGHT SOURCE	Pulsed UV LED	
LED LIFETIME	5 years typical, thereafter, LED replacement	
OUTPUTS	Relay contacts, RS-485, 4-20 mA (as standard)	
TELEMETRY OPTIONS	RS-232 Ethernet/LAN Audio alarm Wireless Radio Link Wi-Fi GSM	Custom Solutions: Optional adapters available, contact Sales Engineer for additional information
USER INTERFACE	ROW Configurator software for setup & adjustment ROW Manager software for network visualization	
CERTIFICATIONS	CE EN 61000-6-2, 61000-6-3, 61326-1, 61000-4-2, 61000-4-5, 61000-4-6, 61000-4-8, 61010-1 **US EPA:** EPA/530/UST-90/009 **IP68:** EN 60529	
WARRANTY	2-years factory warranty as standard, supported worldwide	