

Laser Diagnostic Instruments

LDI ROW

# REMOTE OPTICAL WATCHER

Autonomous non-contact sensor for the detection of oil on water. Monitors industrial sites for oil spills and leaks so you can respond quickly. Protect drinking water sources and safe-guard heavy industrial equipment from lubricant oil leaks; protect the environment.

## › 24/7 OPERATION EVEN IN HARSH ENVIRONMENTS

Day or night, in arctic cold or scorching heat, ROW helps you pinpoint the polluter, take action, and avoid lasting damage. Available in anodised aluminium, 316 stainless steel and EXd enclosures for even the toughest locations.

## ROW DETECTS:

motor oils, turbine oils, vegetable oils, fuel oils,  
marine diesel oils, crude oils, heating oils,  
lube oils, hydraulic oils,  
gas oils, motor oils,  
mineral oils

## › LONG LIFE, LOW MAINTENANCE

Robust IP68 certified hermetic design and 5 year LED lifetime. Low power consumption of < 2W with optional remote operation using solar panels & battery.

## › NON-CONTACT DETECTION INSTRUMENT

This means easier installation, no water contamination, and no maintenance.

## › INDUSTRIAL LEADING SENSITIVITY

With over 20 years of experience in R&D, LDI has created the ROW that pulses UV light exciting an oil's native fluorescence. The ROW's photo-optics can detect oil films down to a 1µm layer, while minimizing false alarms.



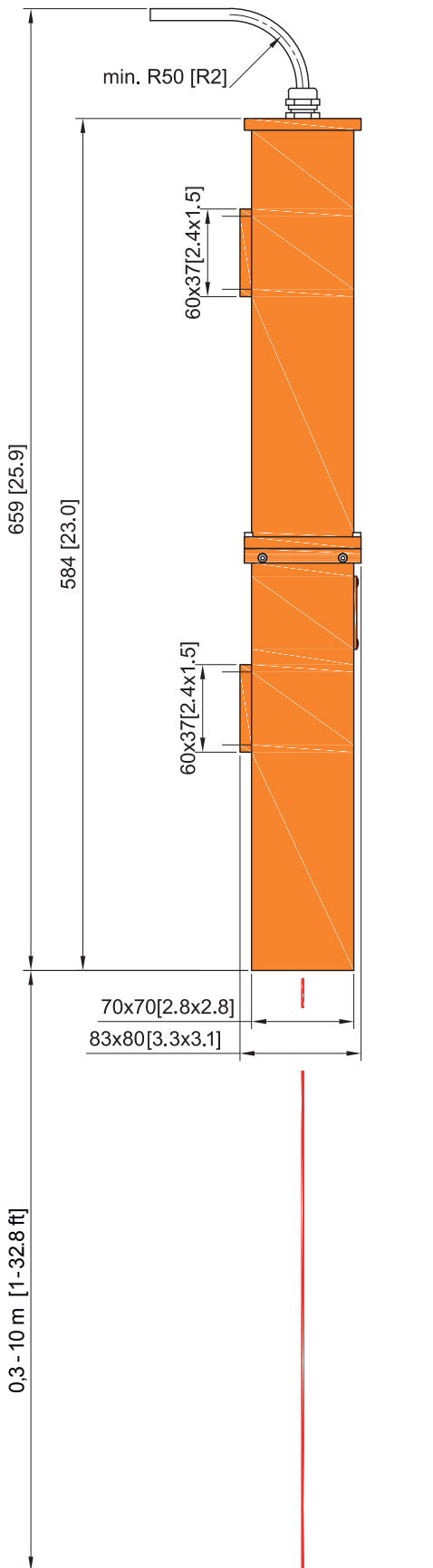
France,  
Sewer Monitoring

Estonia,  
Water Treatment Plant

Poland, Power Plant

South Korea,  
Municipal  
River Monitoring

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



Dimensions unless otherwise stated: mm [inches]

## TECHNICAL SPECIFICATIONS

<b>MODEL</b>	O-2311A	
<b>SENSITIVITY</b>	> 1 µm (micrometer) oil film	
<b>RANGE</b>	up to 10 m above surface (water or ground)	
<b>OPERATION TEMPERATURE</b>	-30°C to +60°C [-22°F to 140°F]	
<b>ENCLOSURE</b>	IP68, pressurised (Ar) hermetically sealed, weather proof, powder painted, anodised aluminium Stainless steel and ATEX Ex d available	
<b>DIMENSIONS</b>	659 x 83 x 80 mm [25.9 x 3.3 x 3.1 in]	
<b>WEIGHT</b>	1,7 kg [3.7 lbs]	
<b>POWER OPTIONS</b>	12 VDC (10V - 30V) as standard other options: 110/220 VAC 60/50 Hz AC/DC adapter, solar/battery options available	
<b>POWER USAGE</b>	< 2 Watt (DC)	
<b>LIGHT SOURCE</b>	pulsed UV LED	
<b>LED LIFETIME</b>	5 years typical, thereafter, LED replacement	
<b>OUTPUT</b>	relay contacts, RS-485, 4-20 mA (as standard)	
<b>COMMUNICATION OPTIONS</b>	RS-232 ethernet/LAN audio alarm wireless radio link WiFi GSM custom solution	optional adapters available – contact Sales Engineer for additional information
<b>USER INTERFACE</b>	ROW Configurator for setup & adjustment ROW Manager for network visualization	
<b>CERTIFICATIONS</b>	<b>CE:</b> EN 61000-6-2, 61000-6-3 EN 61326-1, 61000-4-2, 61000-4-5, 61000-4-6, 61000-4-8, EN 61010-1 <b>IP68:</b> EN 60529 <b>US EPA:</b> (EPA/530/UST-90/009)	
<b>WARRANTY</b>	2 year factory warranty as standard, supported worldwide	