Laser Diagnostic Instruments **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. Protects drinks water sources and safe-guards heavy industrial equipment from lubricant oil leaks; protects 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

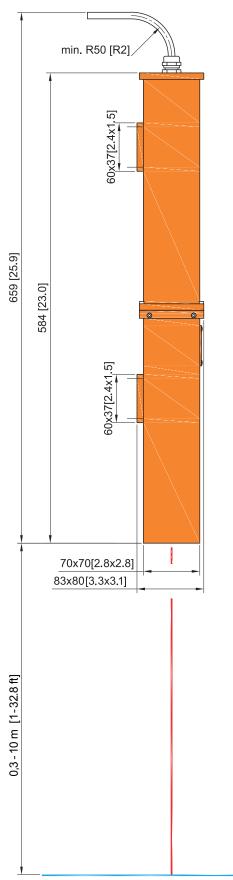
With over 20 years of experience in R&D, LDI has created the ROW than pulses UV light exciting an oil's native fluoresence. The ROW's photo-optics can detect oil films down to a 1µm layer, while minimizing false alarms.

France, Sewer Monitoring

> Estonia, Water Treatment Plant

> > South Korea, Municipal River Monitoring

Poland, Power Plant



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

TECHNICAL SPECIFICATIONS

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

Dimensions unless otherwise stated: mm [inches]