

A monitoring solution for every situation.



LasIR MP - Mini Portable Series

An analyzer and optic assembly designed for applications that require ambient air measurements - potrooms, remote paths, and mobile applications.



LasIR MS - Mini Stack Series

An analyzer with built in optics designed for durability, for in situ, real time stack and duct measurements.



LasIR S - Standard Series

Standard series analyzers are designed to send and receive signals from a central control room to various measurement points. A single analyzer can be set to measure up to 20 locations.

Improve energy efficiency, reduce costs, and safeguard work environments with In-Situ, Real Time gas analyzers for CEMS, combustion, environmental, fugitive emissions, health, safety and process monitoring.



96 Bradwick Drive
Concord, ON, Canada L4K 1K8
tel: 905.669.3547 fax: 905.669.8652

599 Colby Drive Unit #1
Waterloo ON, Canada N2V 1A1
tel: 519.886.7751 fax: 519.886.3768



LasIR Standard Series

In Situ Industrial Gas Monitors

For Environmental, Fire Detection, Fugitive Emissions, Health, Safety, and Process Monitoring applications.

Providing Accurate, Reliable and Continuous measurements at a real time process level with an exceptional life cycle value.

Able to monitor multiple locations using optical sensors at each measurement location connected by cables to a central analyzer.

In Situ Optical Sensors

Sensors mounted on the stack or duct continuously measure the process flow of gases and emissions.

Stacks and Ducts. The LasIR is able to monitor Stacks and Ducts with standard flange connections. Requires line of sight across stack/duct.

Single, dual, and multi pass options offer flexibility for path lengths. Configurations depend on in-situ conditions and sensitivity requirements.

Open Paths. The LasIR also monitors remote locations with stationary mounts and reflector arrays. Requires line of sight across path / remote location.



Real Time Monitoring and Analysis

Measurements are taken and analyzed at rates as fast as 1 second.

Located in a controlled environment up to 500 metres away from measurement locations, the analyzer sends and receives signals to optical sensors via cables.

Multiplexing. Through either splitting or optically switching the light source, one analyzer can monitor multiple locations.

Multiple Species. Depending on the gas and the laser wavelength, simultaneous measurements of up to 4 different gases with a signal analyzer are possible.

Data Loggin. DataView and DataReview are software programs that can be used to display Real-Time measurements (via RS232 serial port) and download archived data (via



LasIR instruments are designed and built to comply with CSA, UL and CE requirements:

Laser Safety: IEC / EN 60825
General Safety: IEC 61010



Standard Series LasIR
Available in 2, 4, 8, and 20 channel units



** images not to scale*

Sensitivities

Gas	Detection Limits (ppm – m)	
CO	30	38 mg/m3
CO2	30	59 mg/m3
CH4	0.5	0.36 mg/m3
HCl	0.2	0.32 mg/m3
HF	0.03	0.03 mg/m3
H2O	0.1	0.08 mg/m3
H2S	5	8 mg/m3
NH3	0.3	0.23 mg/m3
NO	15	20 mg/m3
O2	100	140 mg/m3

** Detection limits will vary depending on measurement conditions.*

STACK / DUCT OPTICS

Path Length:	Up to 25 meters
Mounting:	9" OD Ansi Flanges
Air Purge Requirements	(depending on conditions) 50 psi @ 15 L/min
Environmental Conditions	Gas: -100 to +1800 °C, 5 - 95% RH, 25 - 2000 mbar Optics: -40 to 65°C, 5-95% RH, 25 - 2000 mbar
Optic Dimensions	Transmitting / Receiving set: 4kg NEMA Enclosure: 20" (H) 18" (W) 16" (L) 10kg (50 x 45 x 40 cm) 22 lb.

REMOTE OPTICS

Path Length:	Up to 1000 meters
Telescope Dimensions	15" (H) x 6" (W) x 17" (L) 15 x 15 x 15 cm 8.8 lb 4 kg
	Base: 6" (H) x 9" (W) x 14.5" (L) 11.5 lb 5.2 kg
	Optional Tripod: 4.2 kg
Single Element Retro Reflectors	4" x 4" x 8" (33 x 33 x 20 cm) 1.1 lb 0.5 kg
Retro Reflector Arrays	13" x 13" x 12" (10 x 10 x 20 cm) 10 lb 4 kg

ANALYZER SPECIFICATIONS

Dynamic Range:	5 orders of magnitude
Response Time:	1 seconds and higher
Calibration:	Factory set
Laser:	NIR Diode lasers
Outputs & Networking	RS232, Ethernet, 4-20mA, Status relays
Data Storage, Logging and Display Software	Internal storage & External storage via ethernet or RS232 to external computer DataView, DataReview, optional diagnostic software
Power Supply	Input 100 - 240 VAC @50-60Hz, +12 VDC Output: 12V, 60W Operating Voltage: 12 VDC
Analyzer:	6 H x 6 W x 10 D [15 H x 15 W x 25 D (cm)] Weight: 10 lb. (4 kg)