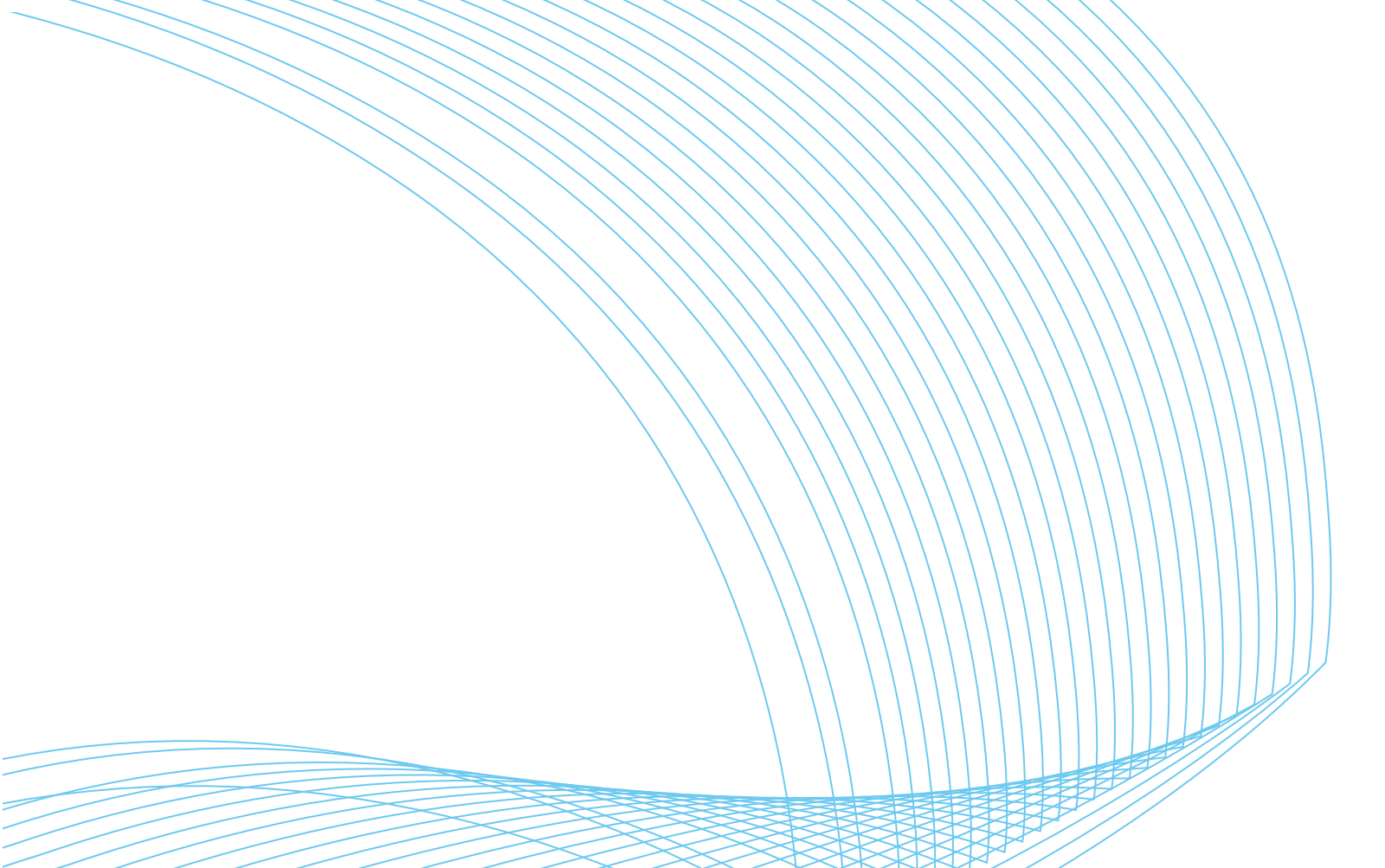




G16 OPACITY MONITOR

MONITOR OPACITY & DUST CONCENTRATION
FOR EMISSION & PROCESS CONTROL



CONTINUOUS MONITORING



KEY FEATURES

- **Compliant with EPA**
- **Local or Remote calibration**
- **Easy audit & performance verification**
- **Display of Opacity (0-100 %), Extinction, and Density (mg/m3)**
- **BUS communication**
- **Multiple functions for control, graphic & data logging**
- **Number of detectors per monitor configurable**
- **Easy to install**
- **Easy cleaning of lenses**
- **Low purge air consumption**
- **Robust design with low maintenance cost**

APPROVALS AND CERTIFICATES

- **Type Approval for Marine, Offshore and Industrial Applications in progress**

LATEST GREEN LASER

The G16 Opacity Monitor is an advanced smoke and dust monitoring system designed to the highest standard for use on a range of industrial applications. Using state of the art module design and solid green laser technology, the G16 double-pass measurement method provides an Opacity Monitor that is easy to install, rugged and reliable.

RELIABLE MONITORING

The Transceiver with laser, optical system and electronics are of rugged construction with a high environmental rating. The double pass measurement combined with a perfectly aligned optical laser secures a high level of performance and reliability, even on large duct diameters.

EASY OPERATION

The operator interface (HMI) provides easy system configuration calibration and verification, thanks to a menu driven user- friendly interface. The interface consist of touch Screen and relay contacts, analog outputs and Modbus TCP/IP communication for integration into a wider emission monitoring system.

The G16 Opacity Monitoring system can be arranged with audit module for easy verification.

WITH RELIABLE & ROBUST DESIGN



LOW MAINTENANCE

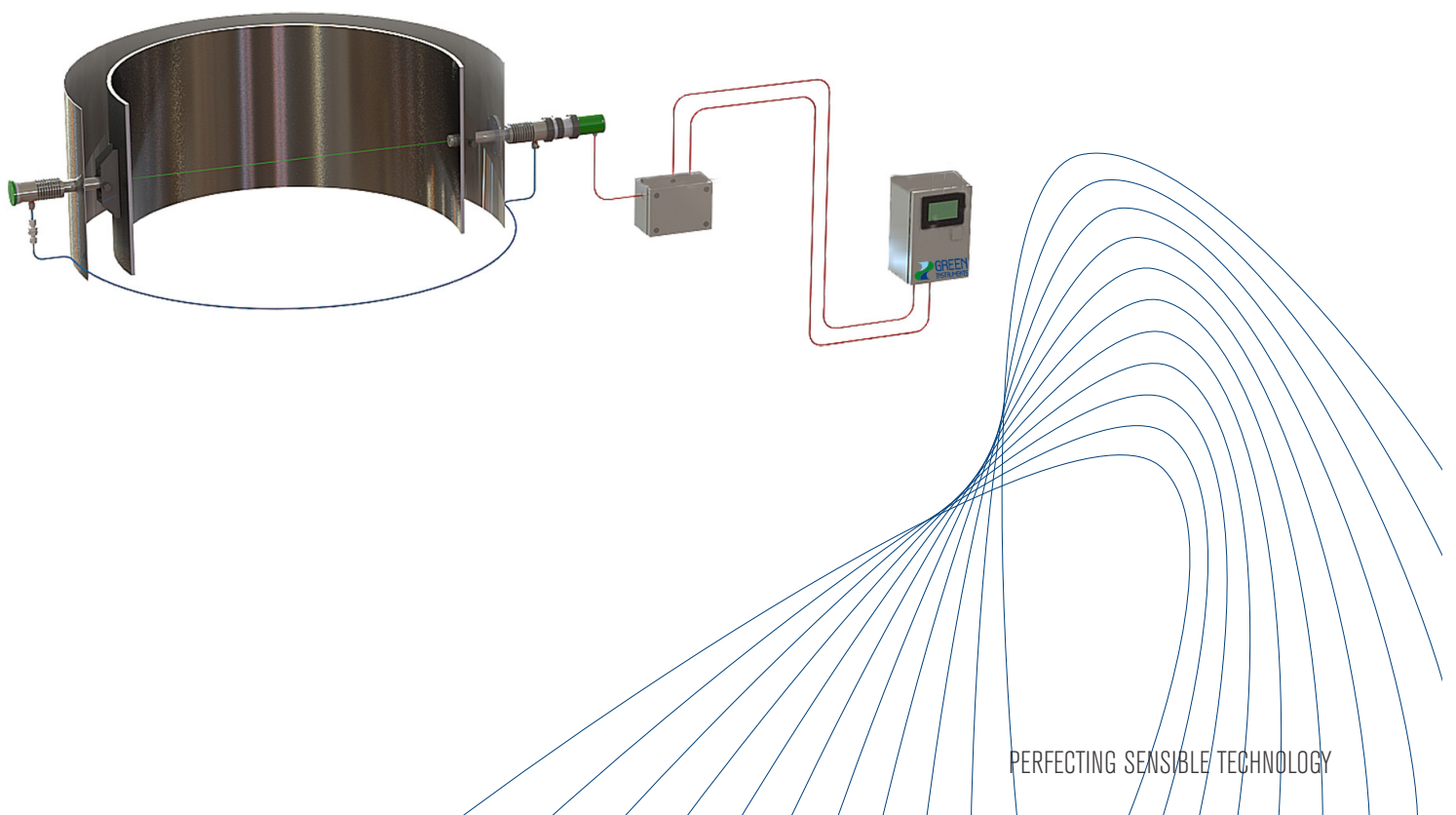
The G16 Opacity Monitor is designed to resist heat and vibration, thus the system is robust while operating in the extreme working environment in and around smoke stacks on board the ocean ongoing vessels.

The purge air system will keep the optical windows against soot contamination. The optical parts can be cleaned easily without any special tools. With no moving parts, the system does not require much maintenance except occasional cleaning of the lenses and calibration.

ENVIRONMENTAL COMPLIANCE

Installing a G16 Opacity Monitor will help you check and document compliance with environmental standards. This will avoid fines, time consuming investigation and costly delay.

Monitoring the exhaust gas emission will contribute positively to your image as environmentally responsible company.



PERFECTING SENSIBLE TECHNOLOGY

SPECIFICATIONS - G16

MONITORING AND CONTROL UNIT

Power supply	100 - 240 VAC - 50/60 Hz - 1.4 A
Ambient temperature	0 - 55 °C
Communication	MODBUS TCP/IP
Analog output (active & linearized)	2 x 4 - 20 mA (4 mA \approx 100 % – 20 mA \approx 0 % Opacity) max. 500 Ω Optional: 0 - 10 VDC (0 V \approx 100 % – 10 V \approx 0 % Opacity)
Relay output	4 relays, NC/NO, max. load: 10 A - 250 VAC
Default alarm level	at 20 % and 30 % opacity
Alarm delay	Default 5 s /programmable (0 - 99 s)
Digital input	6 x Sink/Source inputs
Display	Opacity: 0 - 100 %, Extinction, and Density: mg/m ³
Accuracy	Better than 2 % of full scale
Enclosure	IP 65 steel box
Dimensions	H×W×D: 300x200x150 mm/5.0 kg

TRANSCIEVER

Measuring range	0 - 100 % Opacity
Measuring principle	Transmission
Flue gas temperature	Above dew point up to 400 °C
Flue gas pressure	-500 to +500 hPa
Ambient temperature	0 - 55 °C
Protection	IP 66
Dimensions/weight	OD 600 mm, length 125mm/Kg
Scanning distance	0.5 to 10.0 m

ASSESSORIES AND OPTIONAL

Welding sockets	1" mild steel tubes
Air Module	Purge air supply: 10 - 20 NLPM, i.e. 5 - 10 NLPM each head
Others	Reflector module, Aligment & supporting brackets
Optional	Audit module; Purge air blower; Remote digital display Visualization, recorder and data logging

Specifications subject to changes without notice

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