G7200

Multi Gas Monitoring System

Product brochure

Maritime

Green Instruments

Multi Gas Monitoring System - designed for purpose

Measuring environmentally harmful and hazardous emissions such as SO2, CO2, CO, CH4, NO2, NO and N2O is essential for marine transportation. It has become an urgent necessity due to increasingly stricter regulations, as well as widespread public demand for greener transportation options.

The G7200 Multi Gas Monitoring System addresses these challenges and more, emerging as a cutting-edge and distinctive system, meticulously crafted with a clear purpose based on direct feedback and insights from our customers.

This purpose-built gas monitoring system is designed to endure elevated ambient temperatures and vibrations, guaranteeing its durability and reliability in the rigorous maritime environment.

Furthermore, its scalability enables effortless adjustment to future fuels, ensuring ongoing monitoring effectiveness, as the industry continues to evolve.

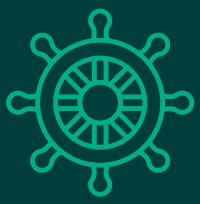
Additionally, the G7200 system excels in sustainability offering cooling without the use of harmful refrigerants and boasting a significantly reduced weight.

The G7200 Multi Gas Monitoring System is extremely durable and offers easy replacement of consumable parts.

"Green Instruments provides comprehensive service and support to ensure optimal operation throughout the entire lifetime of the product, even in the case of retrofitting to a new system".

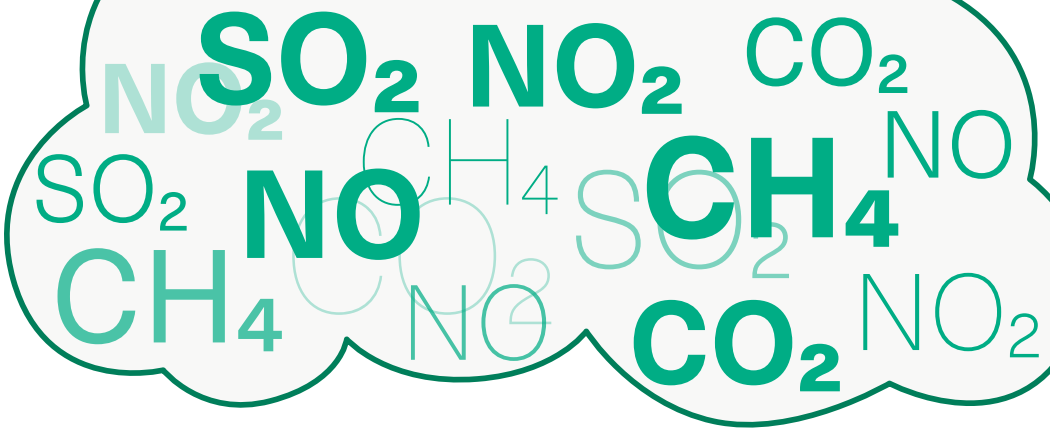
Why use multi gas monitors?

Marine fuel consumption generates harmful emissions, posing risks to the environment and human health. To meet regulations and safeguard both, vessels require advanced gas monitoring systems. With multi-gas monitoring, operators can track harmful emissions in real-time, ensuring compliance, protecting health and the environment, and enhancing stakeholder trust while improving operational efficiency.



How does the multi gas monitoring system work?

The G7200 Multi Gas Monitoring System utilizes non-dispersive infrared and/or ultraviolet measurement technology for reliable and efficient monitoring in various applications. The system includes a sampling board and conditioning unit, enabling simultaneous preparation and measurement of gasses. This allows the system to sample up to four different points, ensuring comprehensive real-time monitoring and a quick response to excessive emissions.



Feature overview of the Multi Gas Monitoring System

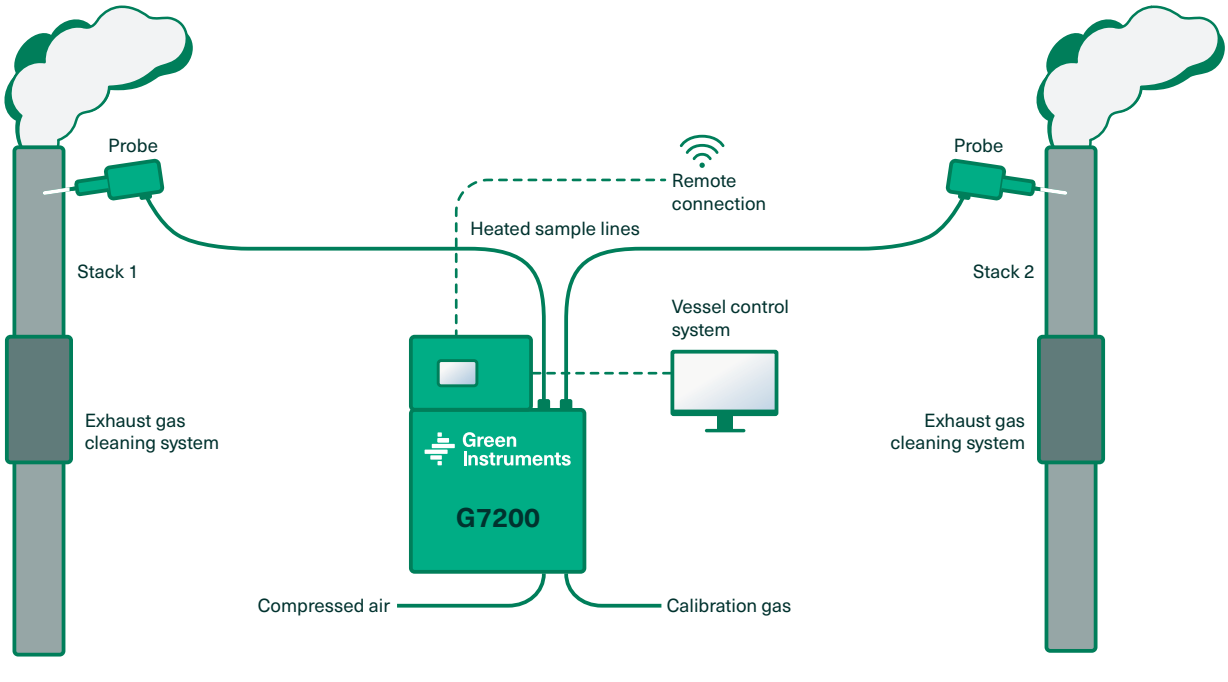
Strategic advantages

- Real-time monitoring and documentation of harmful emissions for emission reporting
- Deliberately crafted for the harsh maritime environment, the G7200 draws from direct feedback and insights provided by our customers.
- Low cost of ownership with global service and support
- Cooling without the use of harmful refrigerants
- Optional remote data access
- Improved usability for reduced downtime

Operational advantages

- Durable and robust design for high ambient temperatures
- Fast, accurate and reliable gas detection with well-proven extraction system
- 5-step filtration
- Modular design for customized monitoring profile
- Measures SO2, CO2, CH4, NO2, and NO levels
- Failsafe zero air system with integrated air treatment unit
- Up to four sampling points with balanced sampling frequence
- Low gas flow for low filter consumption
- Easy replacement of consumable parts by crew or Green Instruments service support
- Digital maintenance plan for optimal performance and service scheduling

G7200 Multi Gas Monitoring System



Specifications – G7200

MONITORING CABINET

Power supply	230V 50/60Hz, 16A - 40A*
Ambient temperature	5 – 55 °C
Material/enclosure	Painted mild steel RAL 7035 / IP 54
Dimensions & Weight	1200 x 800 x 300 mm / Approx. 125 kg*

System Components

7" TFT LCD color touch screen
Single or dual stack sample conditioning
Multi-step filtration system with water trap
Gas pump with automatic flow regulation
Leakage detection and filter monitoring
Temperature control with heating and electric ventilation
Purge air system with air treatment unit
Gas analyzer module, 1-3 depending on configuration

Measurement

Measurement range*	SO2: 0 - 300 ppm
	CO2: 0-20 %
	NO: 0 - 1000 ppm
	NO2: 0 - 300 ppm
	CH4: 0 - 5000 ppm
	Other gases (e.g. N2O and CO) and measuring ranges upon request
Measurement principle*	NDIR & NDUV spectroscopy
Calibration	Zero calibration: Automatic using compressed air
	Span calibration: Manual using connected mixed test gases (depending on analyzer type)
	Possible annual on-site verification and calibration
Sample flow	0,5 l/min

Communication

Interfaces	Modbus TCP/IP
	Optional modbus RTU converter and IOT module

PROBES AND HEATED SAMPLE LINES

Probe tube material	316TI (max. 600 °C) or Hastelloy (max 400 °C)
Flange dimension	DN65 PN6, JIS B2220 5K 65A
Sample line length	4 - 25 m*
Ambient temperature	5 - 55 °C
Dimensions & Weight	175 x 180 x 795 mm / 12 kg

TYPE APPROVALS

Conformities	Guidelines for Exhaust Gas Cleaning Systems, MEPC.340(77)
	NOx Technical Code 2008, MEPC.177(58)
Certification	Rina, ClassNK, ABS

*depending on system configuration

Specifications subject to changes without notice

For more information, please visit our website or contact us. We are more than happy to schedule a demo for you.

Together, let's shape a cleaner and brighter future for maritime transport.

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