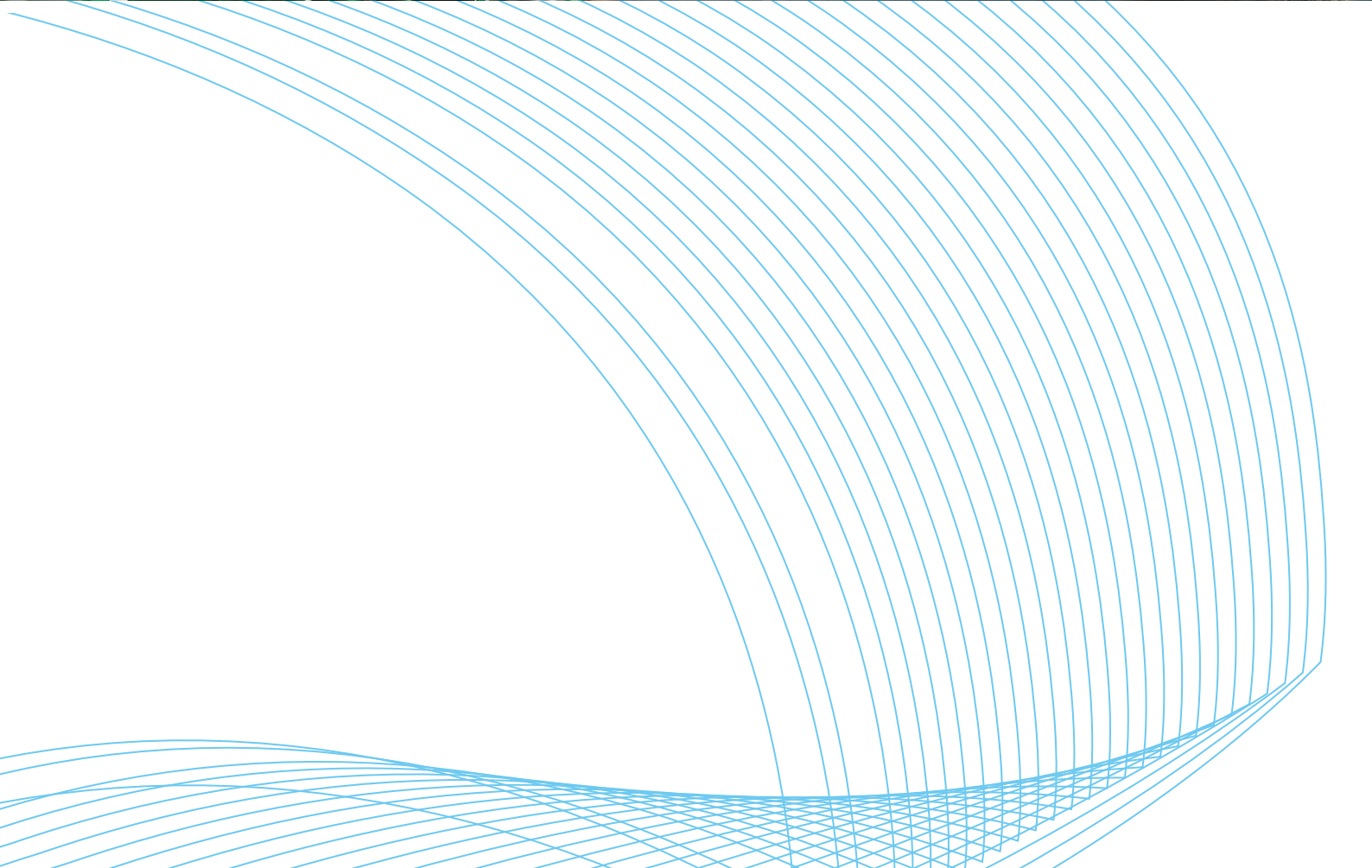


G7000 MULTI GAS MONITORING SYSTEM

COST EFFECTIVE EMISSION MONITOR
FOR ENVIRONMENTAL COMPLIANCE



COST EFFECTIVE



KEY FEATURES

- **Up to 5 sample points**
- **Low cost of ownership**
- **Durable and robust design for marine applications**
- **Automatic daily calibration without special gases**
- **Suitable for vibrations, high temperature & humid processes**
- **Choice between different materials**
- **Well-proven extractive system**
- **Unique double sample conditioning ensures fast response time**
- **Easy installation and maintenance - no alignment required**
- **Long service intervals**

APPROVALS AND CERTIFICATES

- **Fully compliant with MEPC.259 (68)**
- **DNV - GL Type approval**
- **BV Type approval & ABS Certificate**
- **Korean & Lloyd's Register Type approvals**
- **Nippon Kaiji Kyokai Type approval**
- **CCS Type approval**



WELL-PROVEN TECHNOLOGY

The G7000 can monitor the SO₂ and CO₂ concentrations in exhaust gas. It provides you with an accurate measurement of SO₂ in ppm, CO₂ in percent, as well as presents the SO₂/CO₂ ratio.

The gas analyzer is based on a non-dispersive infrared measurement technology, which has been well proven in many industrial applications.

Our double sample conditioning unit prepares the sample for analyzing. This unique feature allows us to sample up to 5 different sample points per system and at the same time maintain a fast response time.

COST EFFECTIVE CEMS

G7000 is a cost effective CEMS (continuous emission monitoring system). The modular design of the system makes it possible to monitor different gasses according to customer specification.

For maintaining the optimum operating temperature, the enclosure is fitted with a rugged air conditioner and together with effective thermal insulating, the air conditioner contributes keeping TCO down.

All materials are specially selected to resist the wet and acidic exhaust gas after a scrubber. The robust design is aimed for harsh marine applications and designed for long intervals between service.

ENVIRONMENTAL COMPLIANCE

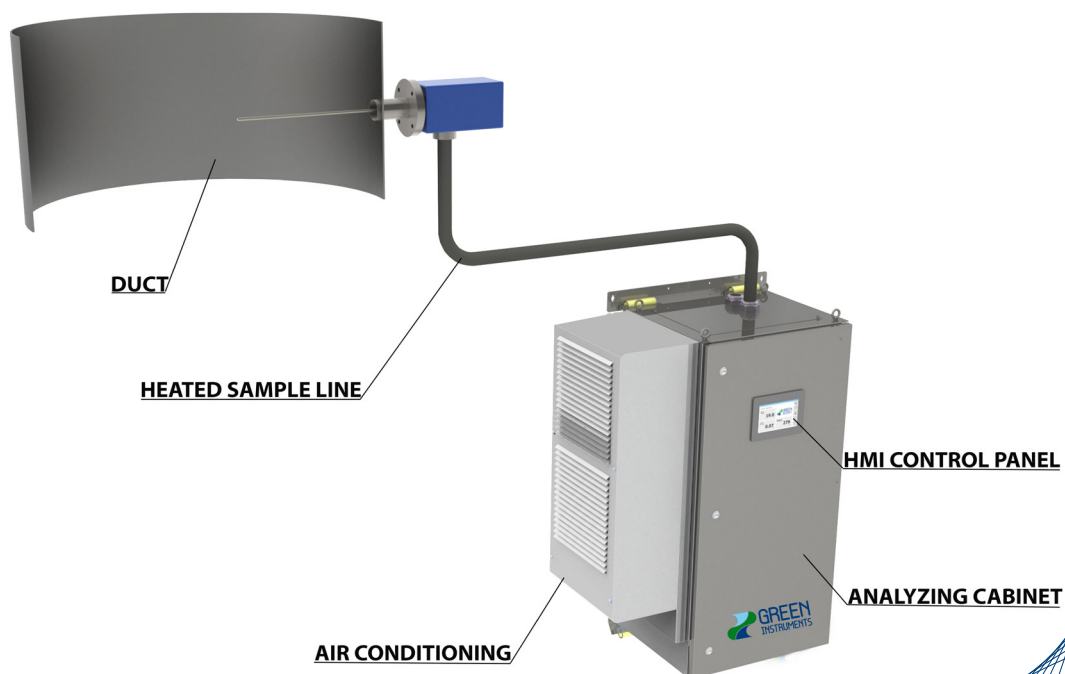


SIMPLE CALIBRATION AND MAINTENANCE

The G7000 is designed for easy calibration and requires minimal maintenance. The system is arranged with automatic calibration by means of an integrated optical filter together with the instrument air. The system can also be verified by test gases in order to show compliance.

APPROVED AND COMPLIANT SOLUTION

The G7000 is fully compliant with IMO regulations - MEPC. 259(68). The G7000 together with Green Instruments' G6100 Water Monitoring System is a complete monitoring system according to MEPC. 259(68). The system has achieved DNV-GL, BV, Korean Register, Lloyd's Register, Nippon Kaiji Kyokai & CCS type approvals & ABS certificate.



SPECIFICATIONS - G7000

MONITORING CABINET

Measuring principle	NDIR
Measurement range	SO ₂ : 0 - 200 ppm & CO ₂ : 0 - 10 % Optional SO ₂ : 0 -1000 ppm & CO ₂ : 0 - 20% Monitor other gasses upon request
Linearity	≤ ±2 % of reading, or ≤ ±0.3 % of full scale whichever is larger.
Repeatability	≤ ±1 % of full scale above 100 ppm or ≤ ±2 % of full scale below 100 ppm
Calibration	Zero Calibration: Automatic using compressed air Span Calibration: Automatic using inbuilt optical filters (Possible to connect gasses for annual verification & calibration)
Power supply	230 V AC - 50/60 Hz. - 16 A dependent on system configuration
Alarm outputs	4 alarm relays for System Warning, System Alarm, Level Warning and Level Alarm; NO/NC
External communication	Modbus TCP/IP
Material/Enclosure	Painted mild steel RAL 7035 / IP 55
Ambient temperature	Class A. 0 - 45 °C (Tested to 55 °C)
Gas flow	Approx. 1 L/min Heated sample hoses from up to 5 probes
Gas connections	Compressed air: 1/4"NPT Female. Air consumption approx. 4 L/min per probe during calibration & 4 L/hour per probe during stand-by
Dimensions/weight	1265 x 1005 x 540 mm (H x W x D)/225 kg

PROBES AND HEATED SAMPLE LINES

Power supply	Supplied from Monitoring Cabinet
Material	316TI (max. 600 °C), or Hastelloy (max. 400 °C) (To be specified upon order)
Flange dimension	JIS B2220 5K 65A (DIN DN65/PN6)
Probe insert length	500 mm
Sample line length	4 - 25 m (Options: available for hose lengths > 25m upon request)
Exhaust gas pressure	-50 - 500 mm WC dependent on material
Exhaust gas temperature	0 - 600 °C