

# G7000 MULTI GAS MONITORING SYSTEM

COST EFFECTIVE EMISSION MONITOR FOR ENVIRONMENTAL COMPLIANCE





#### 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
- · Choise between different materials
- Well-proven extractive system
- Unique double sample conditioning ensures fast response time
- Easy installation and maintenance no allignment required
- · Long service intervals

#### APPROVALS AND CERTIFICATES

- Fully compliant with MEPC.259 (68)
- DNV GL Type approval
- BVType approval & ABS Certificate
- Korean & Lloyd's Register Type approvals









#### 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 kepping 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.

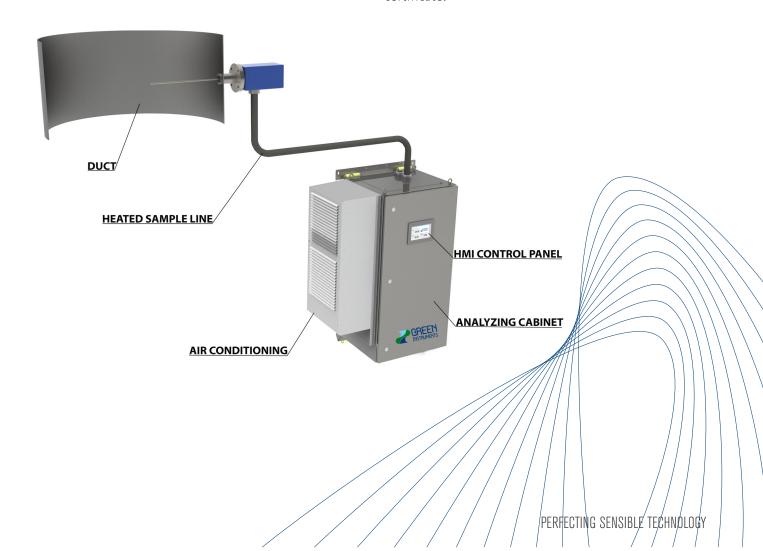


#### SIMPLE CALIBRATION AND MAINTENANCE

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 type approvals & ABS certificate.



## SPECIFICATIONS - G7000

#### MONITORING CABINET

Measuring principle NDIR

**Measurement range** CO2: standard 0 - 10 %; optional : 0 - 25%

SO2: standard 0 - 200 ppm; optional 0 -1000 ppm

Monitor other gasses upon request

**Linearity**  $\leq \pm 2 \%$  of reading, or

 $\leq \pm 0.3$  % of full scale whichever is larger.

**Repeatability**  $\leq \pm 1 \%$  of full scale above 100 ppm or

 $\leq$  ±2 % of full scale below 100 ppm

**Calibration** Zero Calibration: Automatic using compressed air

Span Calibration: Automatic using inbuilt optical filters

**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/EnclosurePainted mild steel RAL 7035 / IP 55Ambient temperatureClass A. 0 - 45 °C (Tested to 55 °C)

Gas flow Approx. 1 L/min

**Gas connections** Heated sample hoses from up to 5 probes

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, or Hastelloy (To be specified upon order)

Flange dimension DN65/PN6
Probe insert length 500 mm

**Sample line length** Standard: 6 - 9 - 12 m

Optional lengths available upon request

**Exhaust gas pressure** -50 - 500 mm WC dependent on material

**Exhaust gas temperature** 0 - 500 °C

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