

ShipCEMS Compact

Exhaust gas emissions from ships are subject to international, national, and regulations defined by the International Maritime Organization (IMO). ShipCEMS COMPACT is your guarantee of documented compliance.

The ShipCEMS product series is designed to monitor and report emissions, contributing to local and global environmental challenges.

ShipCEMS COMPACT comprises all-in-one cabinet and can be customised to individual requirements, covering all types of exhaust systems, fuel types and exhaust gas cleaning systems.

ShipCEMS COMPACT can be installed on any vessel type and can be configured to measure a wide variety of chemical components.

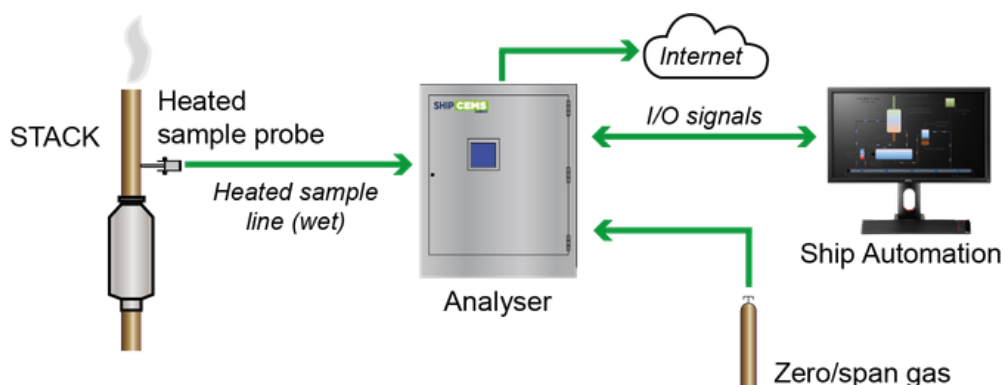


SHIP CEMS
COMPACT

Applications:

- Direct measurement
- Exhaust Gas Cleaning System
- Carbon capture
- Methane slip
- EU ETS Compliance
- Continuous monitoring of SO₂, NO_x, CO, CO₂, O₂, CH₄, N₂O, NH₃
- Extractive measuring technology for demanding applications
- Rugged design for marine environment and operations
- Continuous operation with automatic analyzer calibration
- Low-cost maintenance, long service lifetime
- Measures on a dry basis
- Remote operation via ShipCEMS Connect





Technical specifications

Measuring range

- SO₂: 0–200/0–250 ppm
- CO₂: 0–10/0–15 mol%
- NO: 0–2000 ppm
- CO: 0–2000 ppm
- CH₄: 0–10000 ppm
- N₂O: 0–200 ppm
- NH₃: 0–500 ppm

Streams

- 1–8 engines

Measuring principles

- IR spectroscopy

Verification gas requirements

- 80% of component range
- N₂ (balance)
- Consumption: 5L/min (only during calibration)

Zero gas requirements

- Nitrogen or instrument air according to ISO8573-1:2010 (4.3.4)
- Consumption: 5L/min (only during calibration)

Analyser Cabinet

- Dimension: 1100 x 800 x 350 mm (including cooler)
- Weight: 130 kg

Heated sample probe:

- Weight: 10 kg
- Flange diameter:
- **DIN flange:**
 - DN65 / PN6
 - DN65 / PN10/16
- **JIS flange:**
 - 10K / DN65
 - others on request

Heated sample line

- Diameter: Ø40 mm
- Flexible design
- Length: 5–25 m
- Cut on site

Ingress protection

- Cabinet: IP44
- Sample probe: IP54

Ambient temperature

5–55 °C

Materials

Cabinets: SS316L
Tubing: PFA/PTFE
Fittings: SS316

Power requirements

120–230 VAC

Power consumption

- Analyser cabinet: 1600 W
- Sample probe: 500 W

Communication

- Modbus
- Profibus
- Analog / Digital

Type Approvals

