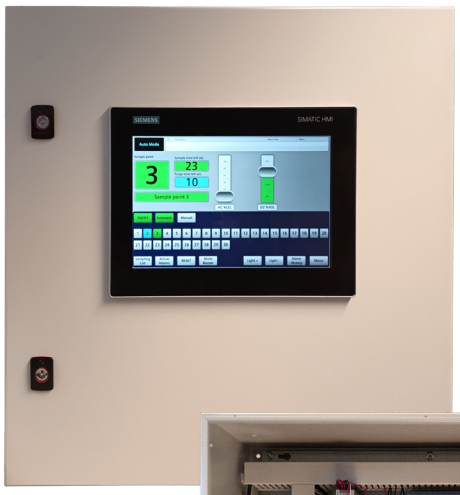
Features

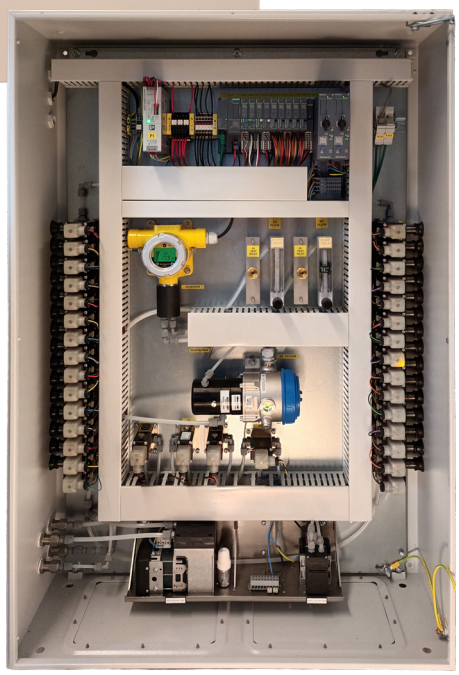
- Infrared hydrocarbon sensor
- Electrochemical toxic gas sensor
- Automatic and sequential sampling & purging of each sampling tube
- Low and high gas alarms, flow alarm
- Adjustable time sequence (purge/sampling) per individual sampling point
- Flame arrestor and shut-off valve for each sampling tube
- Non-return valves in ballast tanks

Optional:

- Purge pressure alarm
- Freely configurable auxiliary relay outputs
- Redundant internal Ethernet line communication between detector and alarm cabinets
- Serial line communication on TCP/IP Modbus RTU
- External Modbus RTU via RS485/422 or Modbus TCP via ethernet
- Cabinet cooling/heating



Alarm cabinet



Detector cabinet

Product overview

The OGS 3.2 maritime gas sampling system consists of an alarm/monitoring cabinet and one or more detector cabinets. The alarm cabinet incorporates the operator panels and power control components for the individual detector cabinets. The detector cabinet contains all sampling related electronics, gas sensors, mechanical and pneumatic components, ensuring optimal sample times and large system coverage.

The sampling principle is based on a dual pump scanning cycle. The main pump continuously draws air from all detection points. At the same time, the sample pump checks the individual sample points for gas in a cyclic sequence, minimizing the time required and guaranteeing fast response times. The operator panel indicates the sampling and alarm status on the HMI panel for each point individually.

The system continuously monitors all pneumatics and electronics for possible malfunction. All types of failures, including leakage, will be detected and raise an alarm.

OGS 3.2 comes completely assembled ready for use and fulfills the latest requirements from IACS, EC, IMO, and all major class societies' rules and regulations, including E27 (cybersecurity).

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Technical specification

Technical specification	
Performance standards	EN 60945, DNV S.C. 2.4 See Autronica website for certificates
Operating temperature	With IR sensor only: -40 °C - +60 °C With electrochemical sensors: cell dependent
Storage temperature	-25 °C - +55 °C (Separate range for gas sensors)
Operating humidity	0 - 99% (non-condensing)
Nominal voltage	115/230 VAC, 50/60 Hz
Number of sampling points	33 points per cabinet (32 external + 1 internal)
Sample/purge time range	12 s - 999 s
Purge air supply	6 - 8 bar
External communication	External Modbus RTU via RS485/422 or Modbus TCP via ethernet
Flow meter for hydrocarbons	Variable area flow meter 10 - 100 l/h
Flow meter for O_2	Variable area flow meter 1.6 - 16 l/h
Flow switch for flow meter	RC10 (NAMUR)
Cable glands	Standard: plastic Optional: nickel plated or stainless steel
Fittings for external connection	SS316 (Other materials optional.)

Components

Description	Part number	Specification
Detector cabinet	116-OGS3.2-DC-MAR	SS316 AX 1200 x 800 x 300 mm
Alarm cabinet with display	116-OGS3.2-AC-MAR	AX 600 x 600 x 350 mm Display 10“

Sensor kits

The system can contain between one and three of the listed sensors.

Part number	Description
116-OGS3.2-SENS-HC200	AutroPoint HC200 (IR)
116-OGS3.2-SENS-PG11	Autronica PG11 (IR)
116-OGS3.2-SENS-TOX	Toxic detectors (NH_3, H_2S, CO, CH_3OH)
116-OGS3.2-SENS-O2	Electrochemical O_2
116-OGS3.2-SENS-XCD	Honeywell Sensepoint XCD (toxic)
116-OGS3.2-SENS-PX2	Autronica PX2

Optional components

Part number	Description
116-OGS3.2-OPT-MAR.PWR	Emergency power switch-over for uninterrupted operation
116-OGS3.2-OPT-MODCOM	Modbus RTU for seamless integration with vessels ICSS or SAS
116-OGS3.2-OPT-LIGHT	Internal cabinet illumination for maintenance in low-light environments
116-OGS3.2-OPT-WTR.SEN	Moisture leakage detection
116-OGS3.2-OPT-HEAT	Heating Kit (Electrical)
116-OGS3.2-OPT-COOL-REF	Cooling Kit (Electrical)