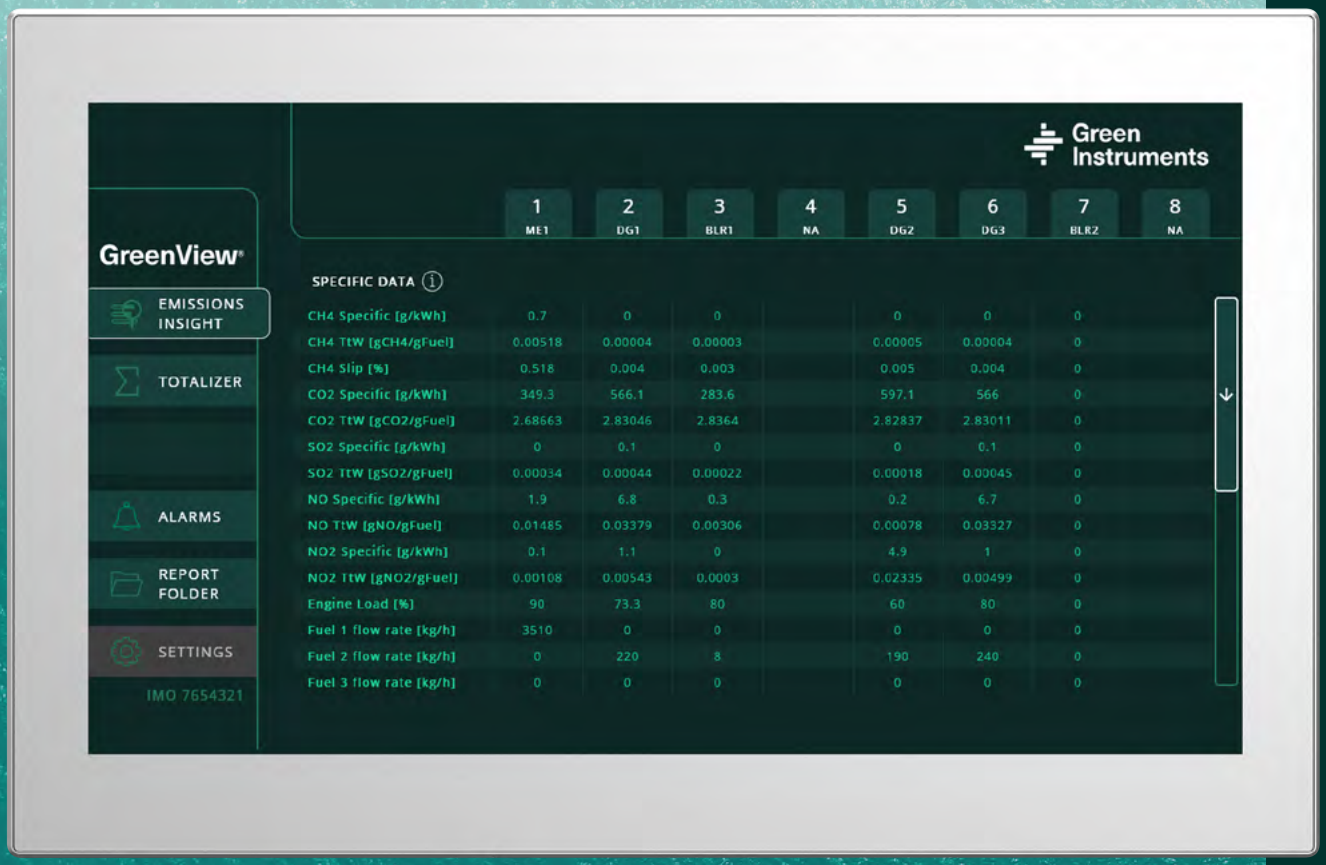
GreenView®

Emissions Insight



Direct emissions monitoring - avoid overestimation

Green Instruments

GreenView Emissions Insight - actionable insights

New regulatory requirements challenge shipowners to improve efficiency and cut greenhouse gas (GHG) emissions. Yet, many still report GHG emissions based solely on fuel consumption and default factors. With GreenView Emissions Insight, shipowners gain access to a smarter alternative: accurate GHG reporting based on real-time data from direct emission monitoring.

This software platform combines engine performance and fuel consumption with exhaust gas measurements to deliver precise mass emissions reports. It is designed to log, visualize, and generate reports using data from a continuous emissions monitoring system (CEMS) – the G7200 Multi Gas Monitoring System – eliminating the need for expensive and often inaccurate exhaust gas flow meters.

With onboard integration, the platform transforms volumetric data into accurate mass emissions, resulting in immediate access to insights that can enable savings on CO_2 allowances or penalties, while supporting more efficient operation.

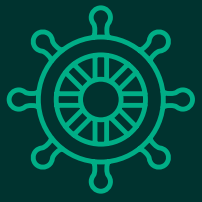
Operators are empowered to optimize engine performance, cut emissions, and realize economic benefits. Real-time data documents the feasibility of green initiatives along the way.

GreenView Emissions Insight provides a competitive edge, ensuring economic gain and stronger commitment to climate protection. Live mass emissions data enables immediate optimization of operation behaviour.

- **Real emission insights without exhaust gas flow meters**
- **Actual data for strategic decision-making and reporting**
- **Optimize operations in real-time – cut emissions and boost efficiency**
- **Document the feasibility of your green initiatives**

Why use GreenView Emissions Insight?

Relying entirely on default emission factors can cause overestimated emission reporting. GreenView Emissions Insight offers a more accurate, scalable, and cost-efficient alternative without the need for exhaust gas flow meters. The system delivers precise emission data that serves as a valuable tool for reporting, without the risk of overestimation. GreenView Emissions Insight empowers shipowners to make informed decisions about fleet upgrades, fuel strategies, and operational improvements.



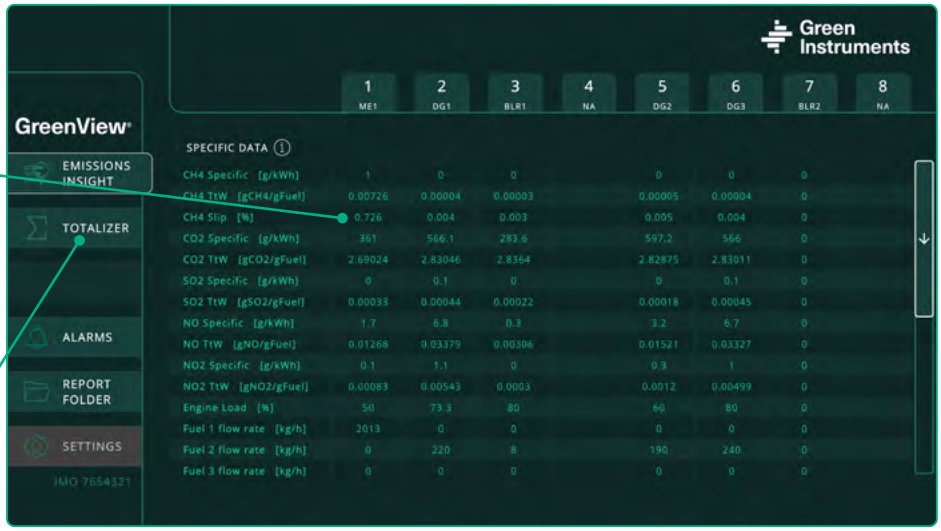
How does GreenView Emissions Insight work?

The GreenView Emissions Insight system calculations are based on the carbon-balance method. It balances the mass of air and fuel going into the engines with the mass of exhaust emitted by the engines, thus transforming traditional volumetric emission from CEMS (CO_2 percentages and CH_4 ppm), into mass emissions (tons of CO_2 or kilograms of CH_4).

Gain a complete overview of current exhaust gas emissions in relation to engine performance and fuel consumption, including:

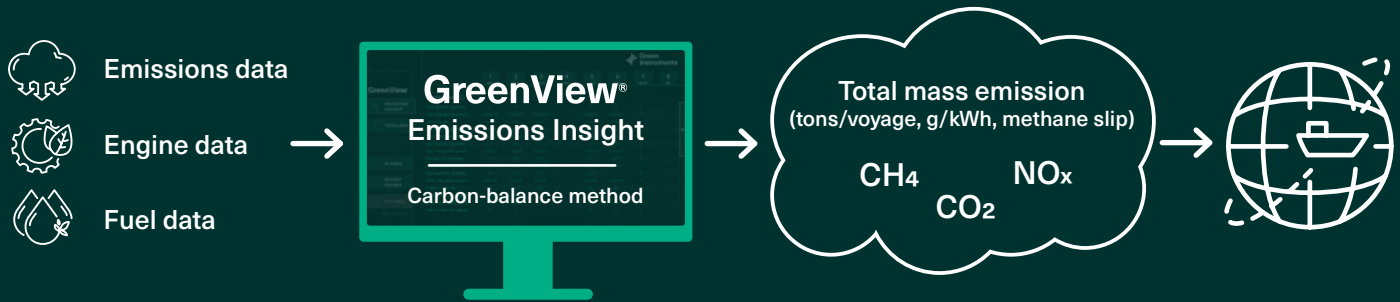
- ***Specific mass emission*** *(g/kWh)*
- ***Tank-to-Wake emission factor*** *(gGHG/gFuel)*
- ***Relative methane slip*** *(%)*

Generate reports with totalized mass emissions for the entire vessel and individual sample points for a given time interval.



The connected CEMS delivers real-time, direct emission monitoring with precise exhaust gas data from all connected sample points.

The system collects engine and fuel data, and is configurable for multiple fuel types with unique chemical composition.



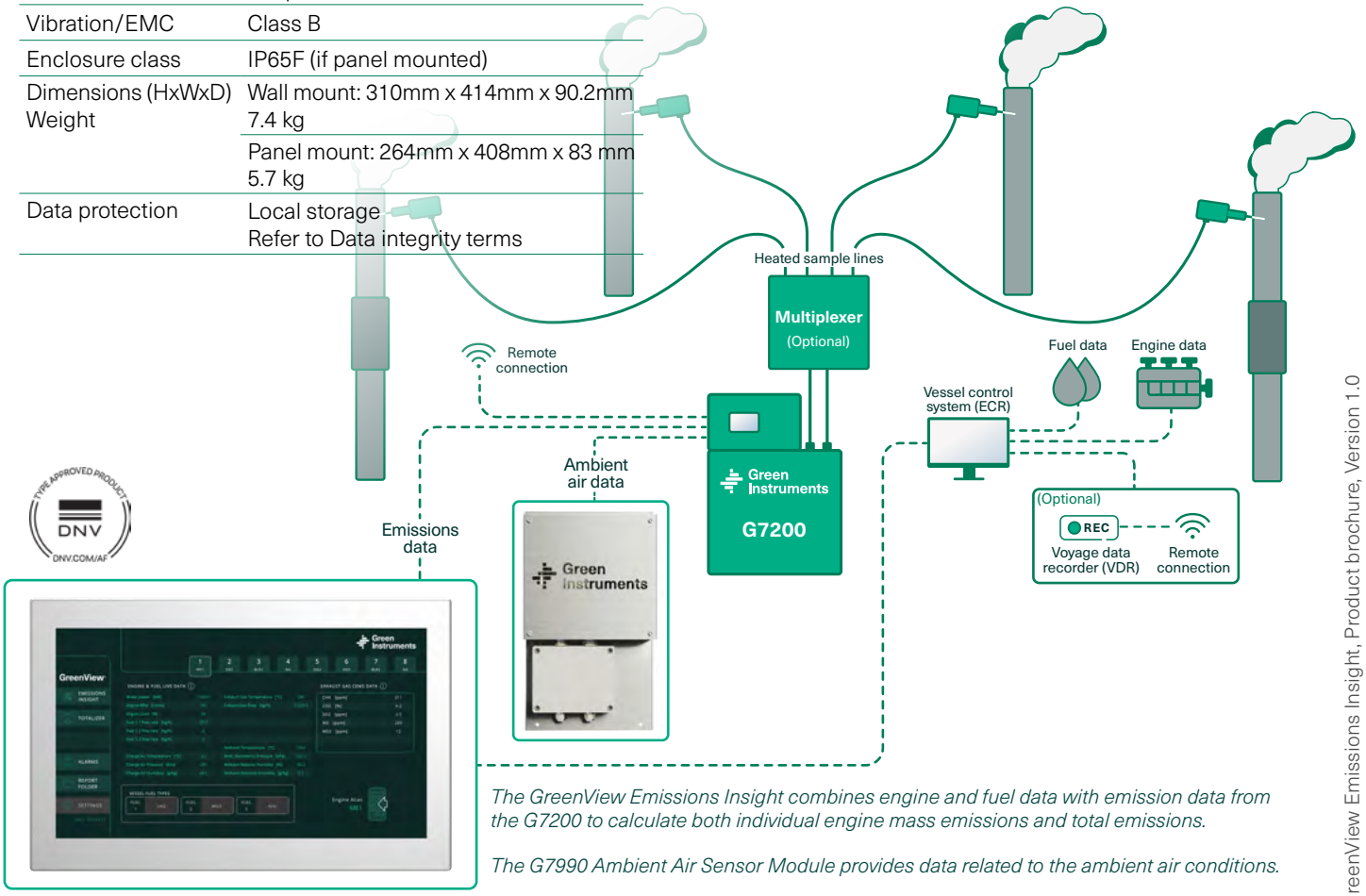
Specifications

GREENVIEW EMISSIONS INSIGHT

Engines supported	1-8 depending on configuration
Power supply	24 VDC
Display	15” TFT LCD display with touch screen
External communication	Modbus TCP/IP Optional Modbus RTU on request
Ambient temperature	Class D. From 0 °C to 55 °C
Humidity	Class B. RH up to 100% at all relevant temperatures
Vibration/EMC	Class B
Enclosure class	IP65F (if panel mounted)
Dimensions (HxWxD) Weight	Wall mount: 310mm x 414mm x 90.2mm 7.4 kg
	Panel mount: 264mm x 408mm x 83 mm 5.7 kg
Data protection	Local storage Refer to Data integrity terms

G7990 AMBIENT AIR SENSOR MODULE

Power supply	230 VAC – 50/60 Hz
External communication	Modbus TCP/IP
Enclosure class	IP44
Dimensions (HxWxD) Weight	550mm x 320mm x 140mm 8.2 kg



The GreenView Emissions Insight combines engine and fuel data with emission data from the G7200 to calculate both individual engine mass emissions and total emissions.

The G7990 Ambient Air Sensor Module provides data related to the ambient air conditions.

Impacting the world – one ship at a time!