

VRS - Cloud Enabled

VRS 002 G2

The VRS 002 G2 – Cloud Enabled is a state-of-the-art, plug-and-play solution designed for secure vessel-to-cloud communication. This advanced gateway stands as a pivotal tool in the cyber-secure transmission of data, facilitating a robust connection between maritime vessels and GTT Marine’s cloud services.

Cyber Secure Interface to the VDR

Acting as a firewall and proxy server, the VRS creates a secure conduit between the Voyage Data Recorder (VDR) and surrounding networks and systems. It employs a “one-way” protocol to receive data from the VDR, ensuring seamless functionality without compromising the VDR’s performance.

Simple and Secured Data Aggregation

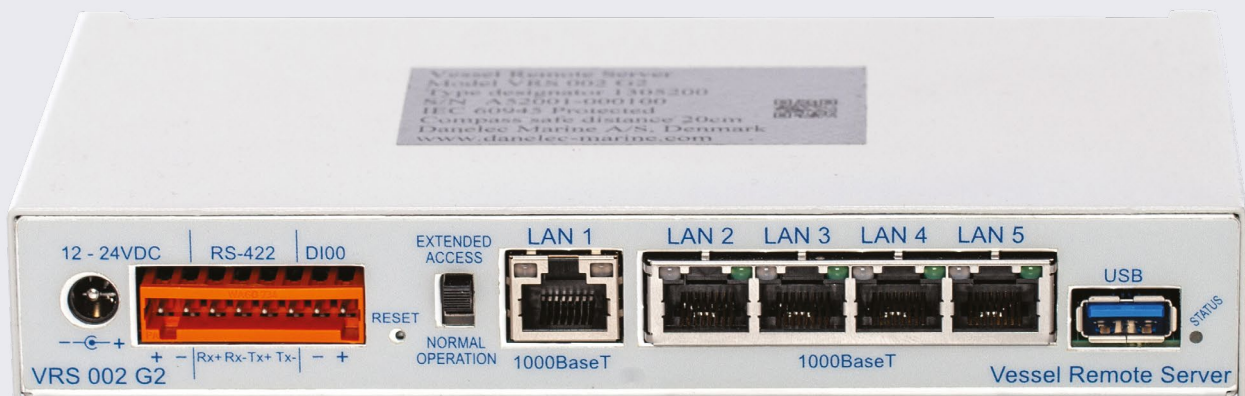
The VRS efficiently aggregates data from various sensors (analog, digital, or serial) through Remote Data Interfaces (RDI). Utilizing the existing network infrastructure onboard, it operates in isolation from other systems, ensuring data integrity. Compatible with both existing and non-Danelec VDR installations, it offers versatility for all types of vessels.

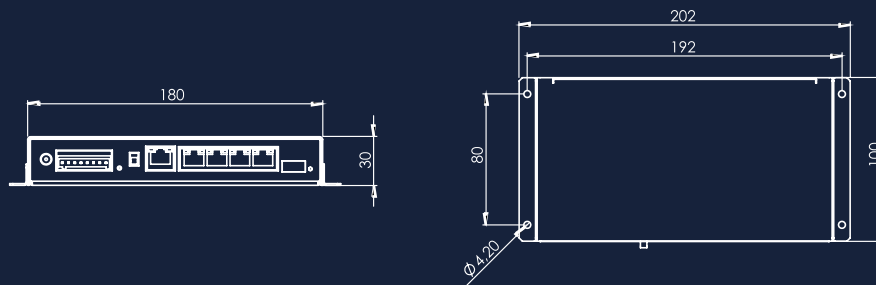
Data Selection and Processing

The VRS enables selective data logging from the VDR and RDI data streams, along with configurable sample and report window sizes. This pre-processed data is then primed for transmission to designated destinations, ensuring efficient data handling.

Most Affordable Maritime IoT Solution

Positioned as the most cost-effective solution in maritime IoT, the VRS facilitates data availability from on-board sensors for third-party analytics. This feature not only enhances operational efficiency but also opens avenues for advanced data analysis and decision-making in maritime operations.



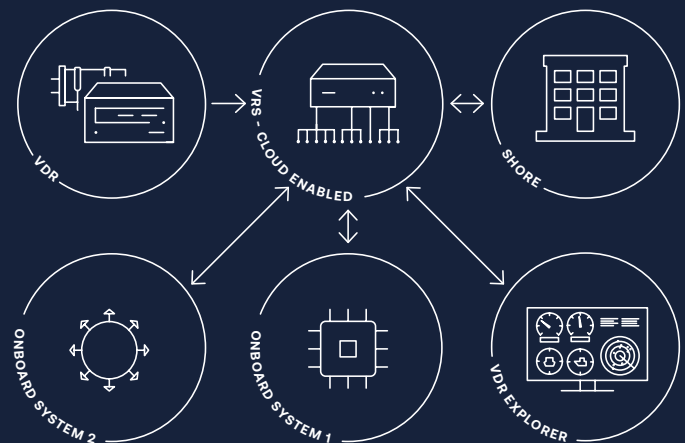


Product Specification

Dimensions	
Weight	450 g
Height/Width/Depth	30 x 202 x 100 mm
Interfaces	
Ethernet (1000BASE-T)	5 ports
RS-422 serial interface	1 TX/RX
Digital inputs	1
Electrical	
Power supply	AC (110-230V, 50-60Hz) IEC 60945 nominal
Power consumption	12-24VDC IEC 60945 nominal, 10W. 110-230VAC IEC 60945 nominal, 12W.
Environmental	
EC 60945 protected	
Onboard Output Format	
Sensor data	IEC 61162-450 IEC 61162-450 sensor data format over TCP/IP REST/JSON API OPCUA MQTT
Images	UDP
Cybersecurity	
Certification	IEC 61162-460 ed. 3 & IACS E27

Scope of Supply

P/N	Description
1305847	VRS 002 - VDR G2 Cloud Enabled (with AC adaptor and CD) AC plugin adaptor, 110-230VAC, various plug types Mounting brackets - kit
Subscriptions	
6305842	Safety Insights
5305959	Data as a Service (DaaS) 250+ data points
5305958	Data as a Service (DaaS) 250 data points
5305957	Data as a Service (DaaS) 100 data points



Integration with Danelec Safety Insights

Enabling access to GTT Marine’s comprehensive cloud services is straightforward, providing a suite of advanced functionalities.

Remote Monitoring and Configuration: Efficient remote monitoring and configuration of the VDR, ensuring optimal performance and ease of management from any location.

Incident Data Retrieval: In the event of an incident, download the complete data set from the VDR, providing critical insights and facilitating prompt response and analysis.

Regular Data Transmission to Shore: Easily transmit selected data sets to shore-based operations, ensuring continuous monitoring and up-to-date information flow, enhancing operational efficiency and decision-making processes.