

VRS - Cloud Enabled

VRS 002 G2
Datasheet



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 Danelec'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.

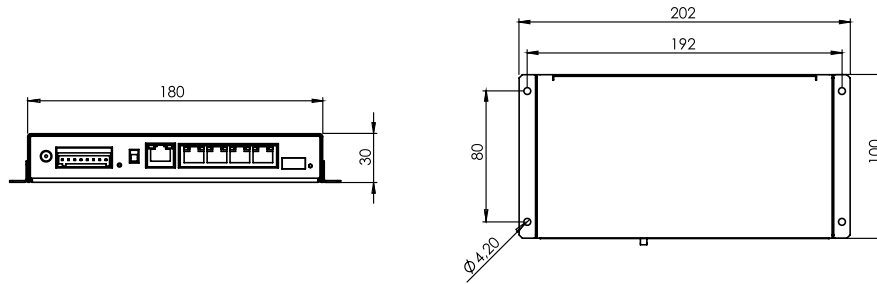
Data Selection and Processing

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

IEC 60945 protected

Onboard Output Format

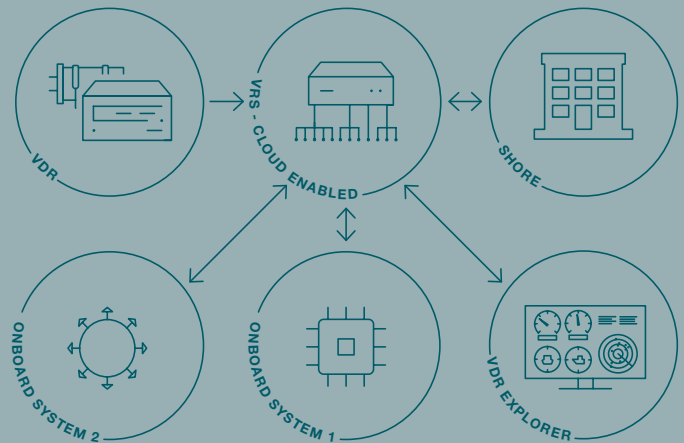
| | |
|-------------|--|
| Sensor data | IEC 61162-450 IEC 61162-450 sensor data format over TCP/IP REST/JSON API |
| Images | UDP |

Cybersecurity

| | |
|---------------|---------------|
| Certification | IEC 61162-460 |
|---------------|---------------|

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 | VDR Remote Services |
| 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 |



Local Distribution of Data to Onboard Systems

The **VDR Remote Services** subscription enables the local distribution of unprocessed VDR data (DVA streaming), enhancing the vessel's operational capabilities.

DaaS Subscriptions go beyond data transfer to shore. They enable the local distribution of both raw and processed data. Our DaaS solutions are designed to collect data from a wide range of sources. This includes not only the VDR but also other critical sensors like the inclinometer in the VRS.

There is always a service tech near your ship

Our extensive global network of service centers carry spare parts and provide service repairs 24/7 with 500+ factory-certified technicians in 50+ countries.