



DM300 S-VDR

Simplified
Voyage Data
Recorder





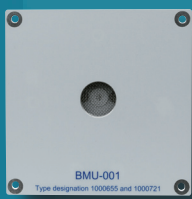
Data Acquisition Unit



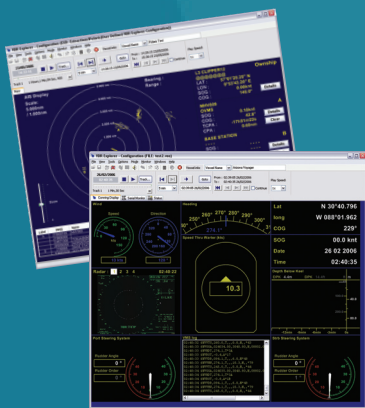
Protective Capsule



Bridge Alarm Panel



Bridge Microphone Unit



Company Information

Danelec Marine was founded in 1982, and have for more than 20 years been closely related to the Royal Danish Navy (RDN) as both supplier of industrial computer systems, as well as partner in several larger computer based simulation projects. In 2001 the RDN chose Danelec as designer and supplier of several computer based products as a part of an upgrade of 31 major vessels where the "Navy VDR" was an integrated part.

Danelec Marine are proud and pleased to introduce the new and 2nd generation of VDR products, which offers state-of-the-art technology and designed with a high focus on reliability and flexibility.

The DM300 S-VDR is an extremely compact and light weight solution, as well as simple and cost-effective to install and maintain.

The systems meet the requirements of IMO performance standard MSC.163(78) and complies with IEC Standards IEC 61996-1/2 and IEC 60945.

Danelec Marine aims to maintain its strong position by constantly upgrading its products to the highest quality and best price/performance to meet the demands from our customers.

Our products are supported by our world-wide sales and service network. For further information please visit www.danelec-marine.com.

The Market

The Danelec DM300 S-VDR will be serving the international retrofit market for vessels above 3000 gross tons constructed before July 1st, 2002.

The regulations stipulate that existing cargo ships on international voyages shall be fitted with an S-VDR as follows:

IMO regulations (implementation)	Start date	Deadline
Existing cargo ships of 20000 GT and upward	First scheduled dry-docking after July 1st, 2006	July 1st, 2009
Existing cargo ships between 3000 and 20000 GT	First scheduled dry-docking after July 1st, 2007	July 1st, 2010

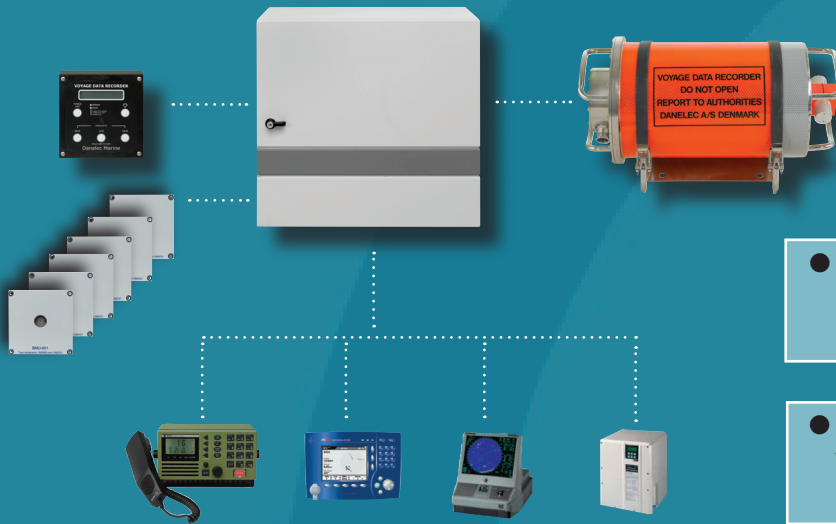
- Can be exempted from S-VDR if the vessel will be taken permanently out of service within 2 years.



- Built to be out there

Compact and Flexible

Basic Configuration



Product Functionality

The DM300 S-VDR consists of a Data Acquisition Unit (DAU), including a super rugged industrial maritime computer platform, approved in accordance with IEC 60945 and a protective data capsule.

The DM300 S-VDR has a number of inputs, e.g. the primary navigation equipment, radar display signals, two VHF radios as well as a number (up to six) dedicated microphones placed on the bridge. A separate Bridge Alarm Panel is connected to the S-VDR and placed on the bridge will give alarms in case of abnormal situations like malfunctions as loss of signals or power sources.

To save the 12 hours of data a highly secure protective capsule is connected to the DAU with a single cable. The protective capsule is able to withstand extreme temperature, pressure, shock and vibration, and complies with the International Maritime Organization (IMO) resolutions for both S-VDR as well as VDR.

The data recorded in the protected capsule can be replayed with the VDR Explorer, either for incident investigation or for training and education purposes. The VDR Explorer replay software is included in the system as standard.

In addition to the above the data can be transferred to a separate MS Windows based computer via a standard Ethernet cable for storage, replay or live play.

- **2 unit solution - complete S-VDR system consist of DAU (Data Acquisition Unit) and Capsule.**

- = Easy and cost-effective installation.

- **Small and lightweight solution - total weight 52 kgs.**

- DAU – 27 kgs & Capsule – 25 kgs

- **The DAU can be bulkhead-mounted, which will ease the installation and increase the potential installation locations.**

- **Modular and expandable design of DAU.**

- Makes the system very service friendly as modules can be easily replaced.

- **Hot Swap**

- Modules can be replaced for service, while system is running and in operation.

- **Up to 100 meters DAU and capsule**

- Using standard CAT5 Ethernet cables
- Zero-Halogen cable supplied as standard (50 m)

- **Standard Ethernet cable (up to 100 metres) between Radar and DAU**

- When using External Radar Interface

- **The DM500 G2VDR benefits from the flexible and low cost architecture**

- **Configuration via Ethernet/HTTP (Browser)**

Product Specification

Data Acquisition Unit	Weight & Dimension	Specifications
	Dimensions: (W x H x D) 475mm x 430mm x 300mm Weight: 27 Kgs	Power: AC power (90V-240V, 50-60Hz, max. 150 W) DC power (18V-32V, max. 120W) For data acquisition: 8 audio channels (6 x Bridge Microphones, 2 x VHF) 8 serial channels (2 x 61162-2, 6 x 61162-2) 2 video channels
Protective Capsule	Weight & Dimension	Specifications
	Dimensions: (W x H x D) 500 mm x 250mm x 250mm (Without cradle) Weight: 25 Kgs	Protective fixed Capsule, complete with cradle, beacon and cable Supplied w/ 50 meter cable – terminated in the capsule Electrical interface: Firewire over CAT 5
Bridge Alarm Panel	Weight & Dimension	Specifications
	Dimensions: (W x H x D) 144 mm x 144 mm x 50mm Panel cutout: 100x100mm.	Serial RS-422 and power. Connected to comm. module in DPU.
Bridge Microphone Unit (Indoor)	Weight & Dimension	Specifications
	Dimensions: (W x H x D) 84 mm x 84 mm x 84mm	Differential microphone output to AUDIO interface module (0,775V@75dB). Powered from AUDIO interface module. Built-in buzzer for self test
Bridge Microphone Unit (Outdoor)	Weight & Dimension	Specifications
	Dimensions: (W x H x D) 96 mm x 96 mm x 84mm	Differential microphone output to AUDIO interface module (0,775V@75dB). Powered from AUDIO interface module. Built-in buzzer for self test Watertight: IP67



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