

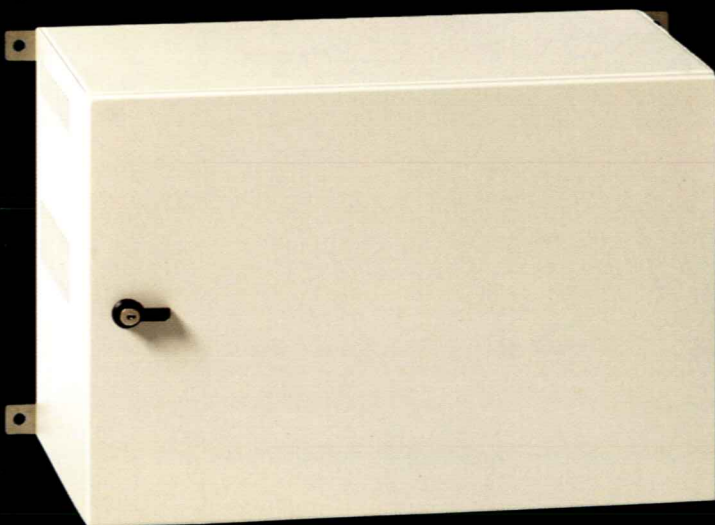


DM 200 S-VDR

Simplified Voyage
Data Recorder

DM 400 VDR

Voyage Data Recorder



- BUILT TO BE OUT THERE -

Highlights

New 3rd generation S-VDR and VDR products

- Ultra compact and lightweight solutions and a natural progression on the proven 2nd generation technology.

Ultra compact and lightweight solutions

- DM200 S-VDR - Weight only approximately 40 kgs
- DM400 VDR - Weight only approximately 65 kgs

DM200 S-VDR - a 2 unit solution, with and easily installed wall-mounted DAU

- Easy and cost effective installation

DM400 VDR Flexible and modular design

- Modular and expandable design that fits most installations

Systems are equipped with solid state Compact Flash and USB memories

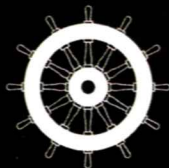
- Enhanced and easy to use data retrieval functions
- Optional extended data storage capacity with external 500GB Hard Disk Drive

Extremely service friendly systems

- Modular design of DAU and SIU, makes replacement of modules easy
- HOT SWAP - modules can be replaced for service while system is running and in operation, and with no need for re-configuration

Easy and user-friendly configuration via Ethernet/HTTP (Browser)

- Auto-sync functionality for configuration of radar reduces time spent on configuration dramatically



3rd Generation S-VDR & VDR products

Following on from the DM300 S-VDR and DM500 VDR, the new and 3rd generation of S-VDR and VDR products offers an unmatched flexibility in a new, compact and light weight, easy to install solution.

The solid construction and innovative design makes the DM200 S-VDR and DM400 VDR systems among the most compact systems available. The modular design combined with the "hot-swap" capability of modules reduces maintenance cost and time greatly.

The DM200 S-VDR and DM400 VDR are configured through a standard web browser interface which incorporates an extremely high level of auto configuration, reducing the cost and time of installation.

The DM200 S-VDR and DM400 VDR use the latest technology in Solid State Memory devices (no moving parts = longer lifetime) and has new USB functionality for simplified data retrieval. In addition, if longer data storage periods are required, optional extended external storage capacity is available.

DM200 S-VDR - Simplified Voyage Data Recorder

The system is Wheelmark approved, meets the requirements of IMO performance standards MSC.163(78) and complies with IEC Standards IEC 61996-1/2 and IEC 60945.

The DM200 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

(Vessels that will be taken out of service within 2 years can be exempted from S-VDR installation)

DM400 VDR - Voyage Data Recorder

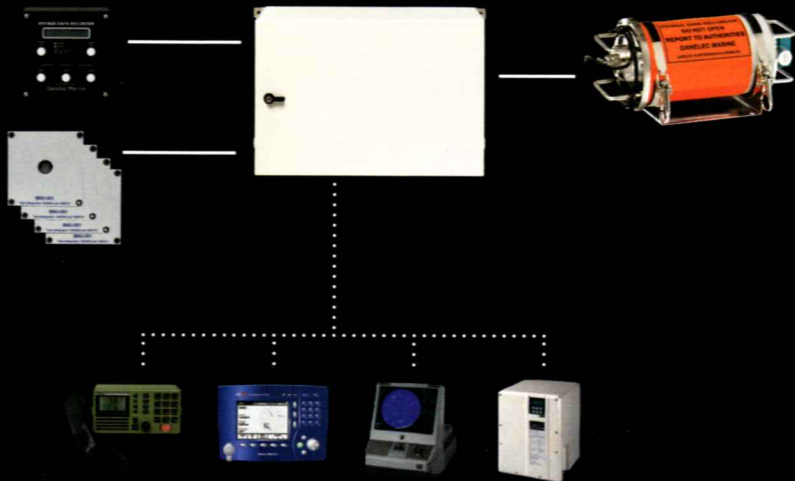
The system is Wheelmark approved, meets the requirement of IMO performance standards A.861(20) and complies with IEC Standards IEC 61996-1/2 and IEC 60945.

The DM400 VDR is intended for all passenger ships as well as for newly constructed cargo ships of 3000 gross tons and upwards.

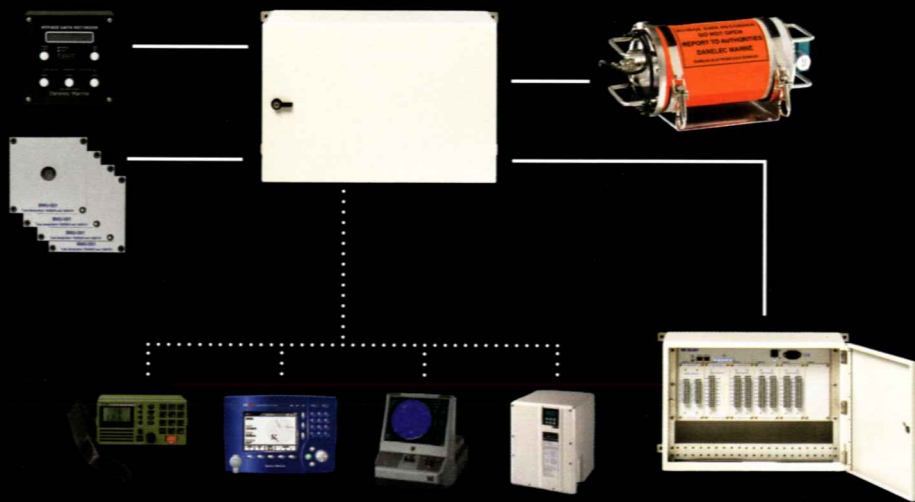
The DM400 VDR is an extremely flexible solution that can be adapted to fit most installations by adding additional modules and interfaces.

- BUILT TO BE OUT THERE -

Basic Configuration DM 200 S-VDR



Basic Configuration DM 400 VDR



Installation and service

Recognizing the importance of global support, Danelec Marine has a world-wide network of trained sales and service distributors able to arrange timesaving and cost effective installation, maintenance and Annual Performance Tests. For details of our network please visit www.danelec-marine.com



VDR Explorer – playback software

Both DM200 S-VDR and DM400 VDR systems are supplied with the VDR Explorer playback software as standard. The software runs on any standard desktop or laptop PC and can provide real-time monitoring or replay recorded data.

Recorded data can be presented in a large variety of both graphical and numerical ways, and is extremely easy and user friendly to operate.

VDR Explorer meets the new IMO Recommendation SN/Circ.246 and MSC.241(81) mandatory from July 1st 2008 for data output port, download and playback software.



- BUILT TO BE OUT THERE -

Product Specification

<p>Data Acquisition Unit</p> 	<p>Weight & Dimension</p> <p>Dimensions: (W x H x D) 525mm x 332mm x 336mm</p> <p>Weight: 23 Kg.</p>	<p>Specifications</p> <p>Power: AC power (110V-230V, 50-60Hz, max. 150 W) DC power (18V-32V, max. 120W)</p> <p>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</p>
<p>Sensor Interface Unit</p> 	<p>Weight & Dimension</p> <p>Dimensions: (W x H x D) 525 mm x 343mm x 336mm</p> <p>Weight: 23 Kg.</p>	<p>Specifications</p> <p>Power: AC power (110V-230V, 50-60Hz, 75 W)</p> <p>For data acquisition: 8 analogue channels 8 serial channels (2 x 61162-2, 6 x 61162-1) 48 digital channels</p>
<p>Protective Capsule</p> 	<p>Weight & Dimension</p> <p>Dimensions: (W x H x D) 420mm x 209mm x 241mm</p> <p>Weight: 14 Kg.</p>	<p>Specifications</p> <p>Protective fixed Capsule, complete with cradle, beacon and cable</p> <p>Supplied w/ 50 meter cable – terminated in the capsule</p> <p>Electrical interface: Firewire over CAT 5</p>
<p>Bridge Alarm Unit</p> 	<p>Weight & Dimension</p> <p>Dimensions: (W x H x D) 144 mm x 144 mm x 50mm</p> <p>Panel cutout: 100x100mm.</p>	<p>Specifications</p> <p>Serial RS-422 and power. Connected to comm. module in DPU.</p>
<p>Bridge Mic. Unit (Indoor)</p> 	<p>Weight & Dimension</p> <p>Dimensions: (W x H x D) 84 mm x 84 mm x 84mm</p>	<p>Specifications</p> <p>Differential microphone output to AUDIO interface module (0,775V@75dB).</p> <p>Powered from AUDIO interface module.</p> <p>Built-in buzzer for self test</p>
<p>Bridge Mic. Unit (Outdoor)</p> 	<p>Weight & Dimension</p> <p>Dimensions: (W x H x D) 96 mm x 96 mm x 84mm</p>	<p>Specifications</p> <p>Differential microphone output to AUDIO interface module (0,775V@75dB).</p> <p>Powered from AUDIO interface module.</p> <p>Built-in buzzer for self test</p> <p>Watertight: IP65</p>



Danelec Electronics A/S . Blokken 44 . DK-3460 Birkerød . Denmark

Tel: +45 4594 4300 . Fax: +45 4594 4301 . Email: sales@danelec-marine.com . www.danelec-marine.com