danelec MARINE

Danelec systems

Solid · Safe · Simple

DM100 VDR

Voyage Data Recorder

In compliance with the new VDR standard, enforced by 1 July 2014

BSH BUNDESAMT FÜR SEESCHIFFFAHRT UND HYDROGRAPHIE

DANELEC MARINE

Danelec Marine produces the most reliable and cost-effective VDR systems in the maritime industry. More than 5.000 vessels carry our VDR.

Solid

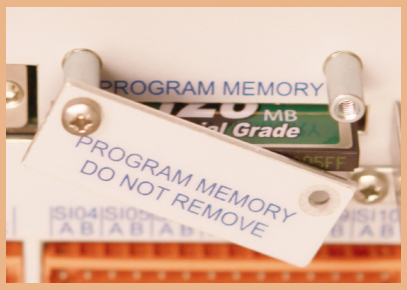
- **High quality products**
  Application specific design ensuring extremely high reliability
- **Service guarantee**
  10 years after product's "end-of-life"

Safe

- **Worldwide network**
  Stock carrying Certified Service Centers and Service Partners in 50+ countries
- **24/7 worldwide**
  Service and support

Simple

- **Remote access**
  Solving technical problems without the need of physical attendance to the vessel
- **SWAP™ technology***
  A unique technology by Danelec to replace Hardware without reinstalling the Software



**SoftWare Advanced Protection technology*

VOYAGE DATA RECORDERS

Like black boxes carried on an aircraft, Voyage Data Recorders (VDRs) enable accident investigators to review procedures and instructions in the moments during an incident and help to identify the cause of any accident.

According to IMO regulations, passenger ships and ships other than passenger ships of 3.000 gross tonnage and upwards constructed on or after 1 July 2002 must carry VDRs to assist in accident investigations and a simplified VDR (S-VDR) must be fitted on existing cargo ships of 3.000 gross tonnage and upwards constructed before 1 July 2002.

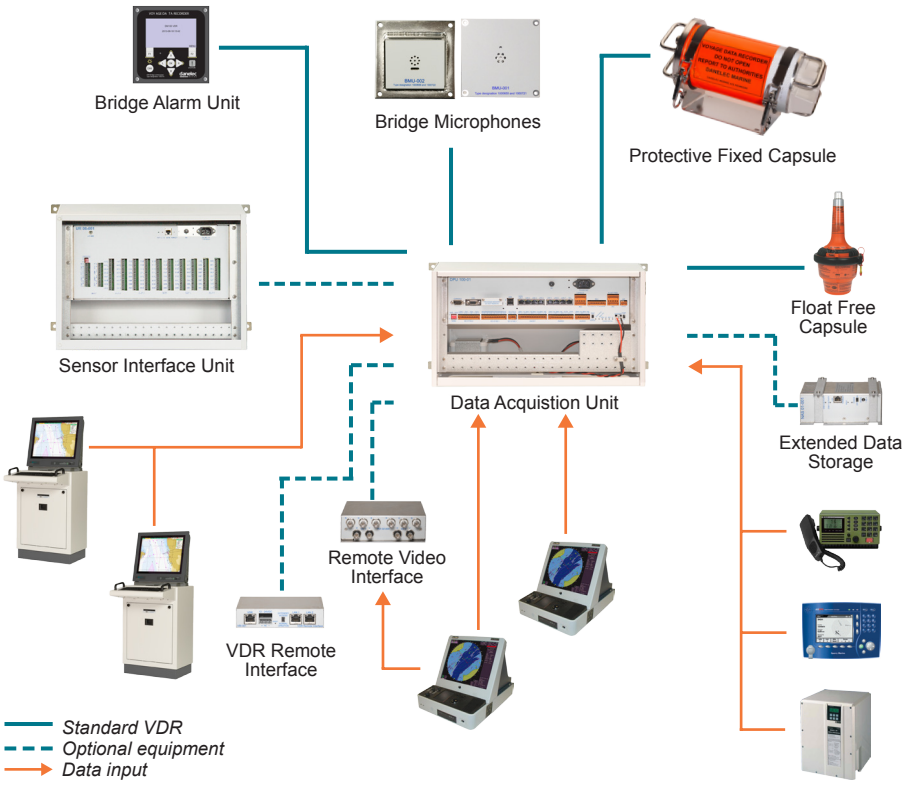
DANELEC MARINE VDR RANGE

– in compliance with MSC.333(90), enforced by 1 July 2014

Danelec Marine VDR systems are designed to record and store, in a secure and retrievable form, information concerning the ship's position, movement, physical status and command and control for the period leading up to and following an incident.

The new 3rd generation of Danelec Marine VDR solution offers an unmatched flexibility in a compact and lightweight, easy to install and maintain solution. The product is designed with a strong focus on reliability and functionality in maritime environments, and meets IEC 61996-1 Ed.2 and MSC.333(90) mandatory from 1 July 2014.

TYPICAL SYSTEM CONFIGURATION



FACT SHEET

STANDARD VDR

Data Acquisition Unit

Dimensions
W: 495 mm
H: 250 mm
D: 242 mm
W: 11 kg

Specifications
10 inputs for audio
12 inputs for serial data
7 inputs for Ethernet data
AC power (110-230V, 50-60Hz)

Protective Fixed Capsule

Dimensions
W: 360 mm
H: 195 mm
D: 208 mm
W: 8 kg

Specifications
48 hours memory capacity
50 meters cable
Ethernet (100baseTX) interface
Powered from data acquisition unit

Float-free Capsule

Dimensions
W: 240 mm
H: 545 mm
D: 221 mm
W: 4.4 kg

Specifications
48 hours memory capacity
50 meters cable
Ethernet (100baseTX) interface
Powered from data acquisition unit

Bridge Alarm Unit

Dimensions
W: 144 mm
H: 144 mm
D: 64 mm
W: 1.1 kg

Specifications
Built-in graphical color TFT LCD display
"On demand" functional performance test
Ethernet (100baseTX) interface
Powered from data acquisition unit

Bridge Microphone (Outdoor / Indoor)

Dimensions
(Outdoor / Indoor)
W: 96 / 84 mm
H: 96 / 84 mm
D: 60 / 30 mm
W: 0.5 / 0.1 kg

Specifications
Watertight: IP66 (outdoor only)
Built-in buzzer for self test
Powered from audio interface module

OPTIONAL EQUIPMENT

Sensor Interface Unit (Compact / Modular)

Dimensions
(Compact / Modular)
W: 525 / 525 mm
H: 342 / 342 mm
D: 169 / 336 mm
W: 12 / 23 kg

Specifications
8 inputs for serial data
8 inputs for analog data
64 inputs for digital data (compact)
48 inputs for digital data (modular)
AC power (110-230V, 50-60Hz)

Remote Video Interface (Analog: BNC / Digital: DVI-I)

Dimensions
W: 149 mm
H: 49 mm
D: 206 mm
W: 0.5 kg

Specifications
2 channels for recording
VGA, DVI-D, DVI-A
Ethernet (100baseTX) interface
Powered from data acquisition unit or locally

Extended Data Storage

Dimensions
W: 61 mm
H: 172 mm
D: 116 mm
W: 1.1 kg

Specifications
Up to 6 months of recording
SSD and HDD solutions
256GB, 512GB and 1TB versions
Ethernet (100baseTX/1000baseT) interface
AC power (110-230V, 50-60Hz) through AC adaptor

VDR Remote Interface

Dimensions
W: 123 mm
H: 26 mm
D: 81 mm
W: 0.2 kg

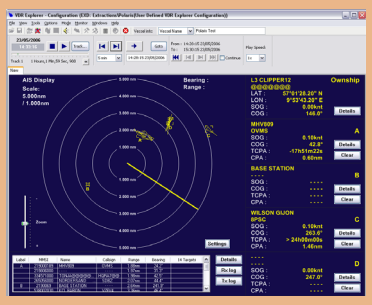
Specifications
1 x Ethernet port for the VDR
2 x Ethernet port for switch for the ship's LAN network
AC power (110-230V, 50-60Hz) through AC adaptor
12-24V DC power input
DIN rail mountable or standalone

VDR EXPLORER playback software

All our products are supplied with the VDR Explorer playback software as standard. The software runs from any PC and can provide real-time monitoring and replay recorded data.

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

- ▶Customizable conning page
- ▶Export data to Windows applications for playback on board or in ship manager's office
- ▶Access to data from shore via remote interface module



VDR Explorer meets the IMO Resolution MSC.333(90), mandatory from 1 July 2014 for data output, download and playback software.

Worldwide network

Recognizing the importance of global support, Danelec Marine has a worldwide network of trained and certified distributors and service centres in more than 50 countries, enabling timesaving and cost-effective installations, maintenance and annual performance tests.

Solid operation at sea

Designed to meet the unique challenges of the maritime world, our products offer proven reliability even under extreme conditions.

Safe everywhere, every time

Efficient global service network delivers high quality support wherever your ships go 24/7.

Simple

Intuitive in use and easy to install, Danelec Marine solutions offer cost-effective performance. The simple choice for meeting today's business requirements.

Danelec Marine A/S

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