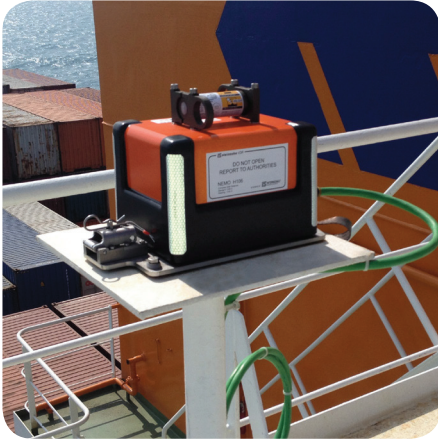




Product sheet



VDR G4^[e]

Voyage Data Recorder



Product sheet

Voyage Data Recorder **VDR G4^[e]**

Value added features

On July, 1st 2014 revised IMO Performance Standards for VDRs (MSC.333(90)) have come into force. INTERSCHALT's VDR G4^[e] is fulfilling all requirements and much more.

- Up to one year recording time and upgradeable on demand
- Real Time Monitoring
- Additional audio recording (i.e. ECR, telephones)
- Corridor Tracking with off-track email notification

Five Years' Warranty



- 4 annual performance tests (APT) incl. Travel allowance in key ports
- 5-year spare part kit (wear and tear)
- Certificates
- Repair of all breakdown defects and damages during operation time
- Transportation
- Handling of all damage claims for the ship owner

Service



- Network of shore-based service coordinators and more than 400 service engineers worldwide
- Seven INTERSCHALT locations and more than a hundred partners in more than 30 countries.
- Annual performance tests carried out by IS certified engineers

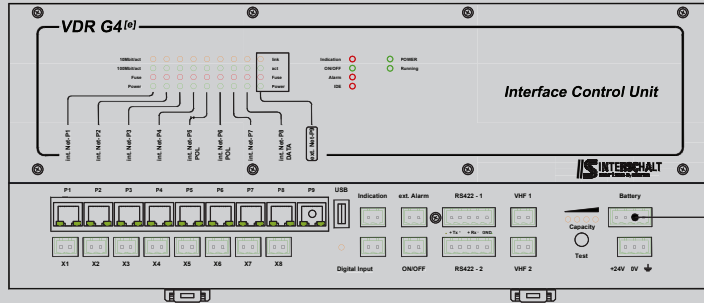
Your benefits



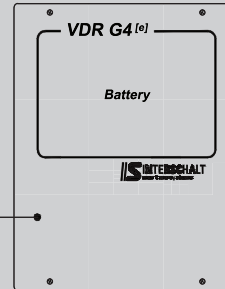
- **Accident prevention system**
- **Data providing for third parties**
- **Industrial standard interfaces**
- **Modular and scaleable design**
- **Reliability due to enhancement of the G4 technology**
- **Annual performance tests carried out by manufacturer INTERSCHALT**
- **5 Years support package**
- **Made in Germany**

Product sheet

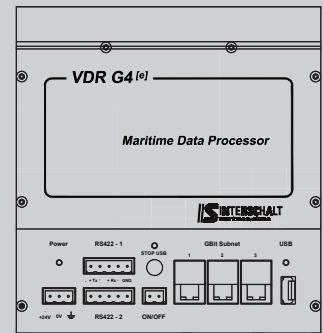
ICU
Typ: H205 001A



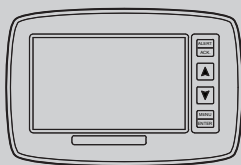
Battery Module
Typ: H605 001A



MDP 2020
Typ: H204 001A



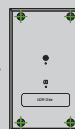
Remote Control Test Panel
Typ: H502 001A



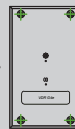
Micro 01
Typ: H604 001A



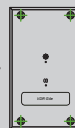
Micro 02
Typ: H604 001A



Micro 03
Typ: H604 001A



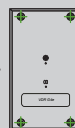
Micro 04
Typ: H604 001A



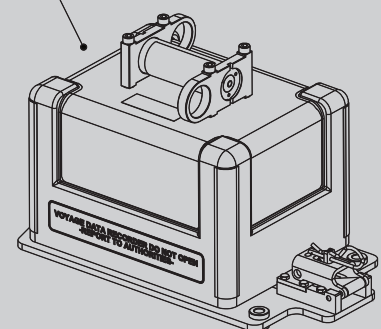
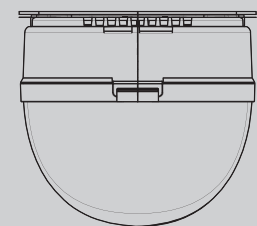
Micro 05
Typ: H604 001A



Micro 06
Typ: H604 001A



Jotron float free FRM - 64GB
Typ: H108 001A



NEMO 2.0 - 64GB
Typ: H108 001A



Product sheet

Overview of VDR G4^[e] Requirements of MSC.333(90)

- ✓ Integrated performance test to establish data integrity for APT or following a service
- ✓ Three data carriers as final recording medium (FRM): fixed capsule, float-free capsule, long-term recording medium
- ✓ Minimum recording interval 48h, long-term recording 30 days
- ✓ At least one separate recording channel for bridge wings. At least two channels for bridge recordings. Definition of intelligibility for speech and environmental signals
- ✓ Recording of both radar units
- ✓ Recording of the current ECDIS with the source of chart data and version
- ✓ Image recording as per the IEC 61162-450 standard
- ✓ Recording of all binding bridge alarms via interfaces to the alarm management system
- ✓ Order/ response recording for engines and all thrusters
Recording of all AIS data
- ✓ Recording of heel and list to reproduce rolling movements
- ✓ Recording of an electronic logbook, if present



Product sheet

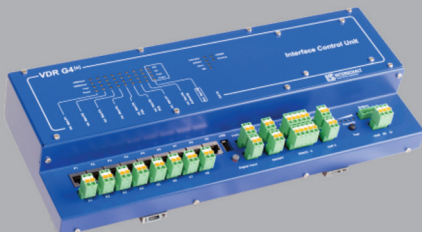
VDR G4^[e] Maritime Data Processor



Performance characteristics:

- PowerPC Dual Core, 1GHz Processor, 512 MB RAM, 128 MB NOR Flash for the operating system and firmware
- SSD 960 GB (Integrated LTRM)
- QNX 6.5 als operation system for VDR application
- Power consumption 8 - 10 Watt
- 3x Gigabit Ethernet, independent Networkports
- Internal µSD Card for Firmware upgrading and/or Parameter memory (standard 4 GB) upgradeable to 32 GB
- Operating voltage 24VDC
- 2x RS422 Serial interfaces
- USB 2.0

VDR G4^[e] Interface Control Unit



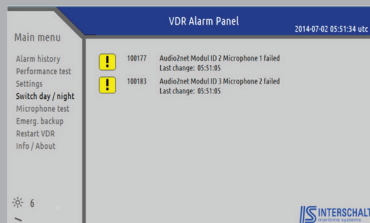
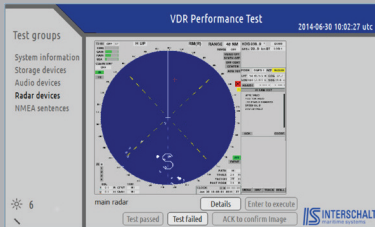
Performance characteristics:

- Control and monitoring of connected system components
- Power consumption 10 Watt
- Operating voltage 24VDC
- Scaleable up to 4 ICU Units plus MDP
- 2 x VHF audio input
- 2 x RS422 serial interfaces
- 2 x 100 MB Ethernet independent
- 8 Ports (1st Network)
- 1 Port (2nd Network)
- Alarm output
- WEB configurable



Product sheet

VDR G4^[e] Remote Control Test Panel



Performance characteristics:

- Ethernet interface
- Serial interface
- Operating Voltage 24 VDC
- Dimmer function
- 7" Graphical display

Functionality:

- Visualisation of pending alerts
- Alert history of the last 24 h
- Performance test
- Restart VDR
- Start microphone test / emergency backup
- Switching day – night view / central dimming function
- Easy configuration (only network and dimming settings)

VDR G4^[e] NMEA2network distributor



Performance characteristics:

- Power consumption 3 Watt
- Operating voltage 24VDC
- 4 x RS422 serial input
- 1 x RS422 IN/OUT
- Network OUT via proprietary VDR protocol (alternative plain NMEA, virtual comport)
- Baudrate 4.800 to 38.400 bit/s
- Web configurable



Product sheet

VDR G4^[e] Microphone VCA004



Performance characteristics:

- Designed for wall box installation (67 mm)
- IP47 / IP 67
- Power Consumption
- Operating voltage 20VDC

VDR G4^[e] Battery backup 9500 mAh



Performance characteristics:

- Capacity 9.500 mAh
- Optional 15.300 mAh
- Output voltage 15,6 VDC

VDR G4^[e] Diving Capsule Nemo 2.0



Performance characteristics:

- Beacon PT9 ninety with a transmission time of at least 90 days
- 64GB Solid State Disk (min 48 h storage capacity)
- Operating voltage 24VDC
- PowerPC, 400MHz Processor, 128 MB RAM
- Operating system LINUX
- 64 MB NAND Flash for operational system
- Power consumption 8 Watt
- 2 x Ethernet independent
- 1 x 100 MB
- 1 x 1 GB PoE
- WEB configurable
- Designed for SSD replacement on board

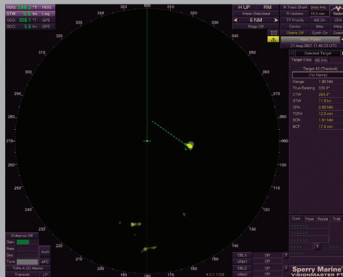


Product sheet

VDR G4^[e] Float free capsule



Optional VDR G4^[e] Pic client Digital video interface



Performance characteristics:

- 64 GB Solid State Disk (min 48 h storage capacity)
- 1 x Interface Ethernet (PoE)
- Operating voltage 24VDC
- WEB configurable

Performance characteristics:

- Easy to integrate
- No additional hardware
- Compatible with standard norms
- Up to 4k display resolution
- Digital signal processing
- ECDIS status check according IEC 61996-1 (Ed. 2) Annex G

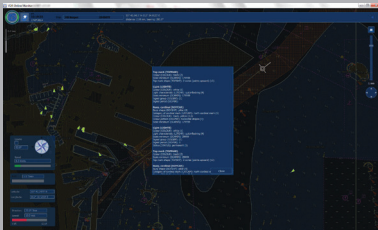
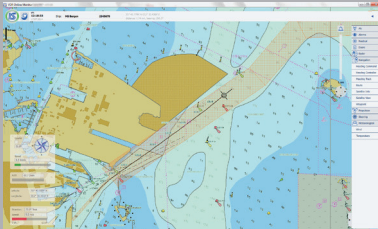
Protocol standards:

- Interschalt protocol
- IEC 62388
- IEC 61162-450 multicast retransmission
- IEC 61162-450 multicast



Product sheet

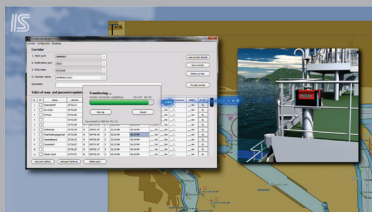
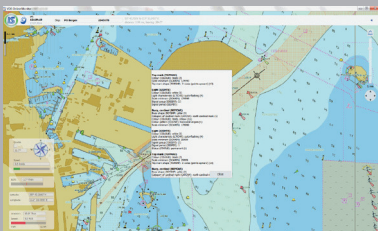
Optional VDR G4^[e] Replayer/ Online monitor



Performance characteristics:

- Actual ship's position on official seachart
- Vessel's actual traffic situation incl. AIS information
- Usage of official S57/S63 ENC
- Day and night view
- OPC/UA interface for 3rd party user (optional)

Optional VDR G4^[e] Corridor Tracking Tool



The IS corridor tracking tool enables ship owners to plan safe voyages and to be notified in critical situations.

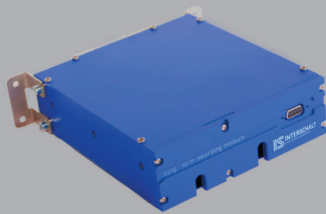
The four step process can be described as follows:

1. Ship route planning via ECDIS
2. Corridor planning longitude and latitude along ship's route
3. Upload to the VDR
4. Shorebased realtime control



Product sheet

Optional VDR G4^[e] Long term recording medium



Performance characteristics:

- 960 GB Solid State Disk (upgradeable to 2 TB)
- Minimum storage capacity of 30 days
- PowerPC, 400MHz Processor, 128 MB RAM
- Operating system LINUX
- 64 MB NAND Flash for operational system
- Power consumption 8 Watt
- 2 x Ethernet independent
- 1 x 100 MB
- 1 x 1 GB PoE
- Operating voltage 24VDC
- WEB configurable

Optional VDR G4^[e] Inclinator



Performance characteristics:

- VDR G4^[e] Interface and acc. to IEC 60945
- Ethernet interface
- Serial interface
- Operating Voltage 24 VDC
- Dimmer function
- Graphical display