

VDL 6000/FASS

FASS Advanced

The AIS Shore Station – VDL 6000/FASS Advanced

fulfills all the requirements of international AIS standards and provides features required for surveillance and management of vessel traffic.

It is easily configured to the specific needs of the individual users, with an embedded controller providing extensive processing and logging functions. The included VDL 6000/FASS Advanced software can be upgraded through local or remote access.



The VDL 6000/FASS Advanced base station can be delivered as a single or redundant installation

Features

VDL 6000/FASS Advanced provides a number of remote functionalities, including Shore Station configuration, software updates, Aids to Navigation targets, repeater functionality, power on/off and more. Other functions are: local logging of AIS messages, local target filtering, replay of AIS data, AIS data catch-up (ensures delivery of data at network congestion or disconnection) and SNMP.

Thanks to the integrated design, VDL 6000/FASS Advanced is easily installed and requires minimum space.

Configuration and interfaces

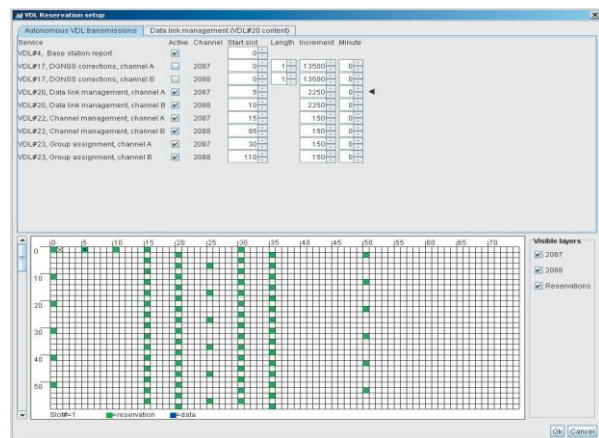
Two FASS Advanced units can be locally connected and configured to form a redundant FASS installation. The two FASS units provide redundancy if one should fail. The presence of two FASS units and two controllers provides redundancy in cases of FASS component failure. A faulty unit can be replaced without interfering with the other unit, therefore a FASS Advanced can be replaced without any downtime for the users of the system.

Configuration, monitoring and control tools

The VDL 6000/FASS Advanced is delivered with the Monitor and Control Tool (MCT) and the Power Supply Management Tool (PSMT).

The MCT is a graphical interface that provides monitoring and control capabilities such as; change of status of the base station and its subunits, change of operational mode, enabling and disabling of services, configuration of the base station and its subunits, display of number of transmitted and received messages as well as software update.

The PSMT allows a user to control the power supply to the base station and its subsystems.



The MCT provides a graphical view of the VDL link where slot reservations are displayed and the user can configure transmissions from the base station



CNS Systems™

VDL 6000/FASS Advanced

Technical Specifications

Power

Input voltage	100 - 240 V AC, 50 - 60 Hz and/or +24 V DC
Power consumption	Nominal 45 W (AC), Nominal 40 W (DC)

Radio

Transmitter output power (adjustable)	12,5 W / 1 W, 50 Ohm load
Receiver sensitivity, 20% MER	< -107 dBm
Bandwidth	25 kHz
Protocol	TDMA (AIS)
Baud rate	9600 bps (AIS) / 1200 bps (DSC)
Modulation	GMSK (AIS) / FSK (DSC)
Frequencies	156.025 MHz - 162.025 MHz
Default channels	87B (161.975 MHz) 88B (162.025 MHz) 70 (156.525 MHz)

GNSS Receiver

GNSS receiver	L1, 16 parallel channels
DGNSS support	NMEA via network RTCM/SC-104 from, external equipment Optional: DGNSS antenna

Interfaces

VHF antenna (combined Tx/Rx)	N female, 50 Ohm
VHF antenna (separate Tx and Rx)	Optional: N female, 50 Ohm
GPS antenna	TNC female, 50 Ohm
Power, AC	IEC320, C 14
Power, DC	Three pole male
Network	2 x RJ45 Ethernet
Serial	4 x RS232

Standards

ITU-R M.1371-4
ITU-R M.1084-4
IEC 62320-1
IEC 62320-2
IEC 61162-1, 2
IEC 61108-1
IALA Recommendation A-124
EN 60950
R&TTE Directive 1999/5/EC
IPC-A-610 (manufacturing)
RTCA/DO-178B (SW development)
SNMP v2C

Physical characteristics

Depth	465 (excl. connectors and front handles)
Height	4 HU (177,8 mm)
Weight	10,4 kg
Width	Standard for mounting in 19" rack

Compliance

BSH Statement of Conformity
CE Declaration of Conformity



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