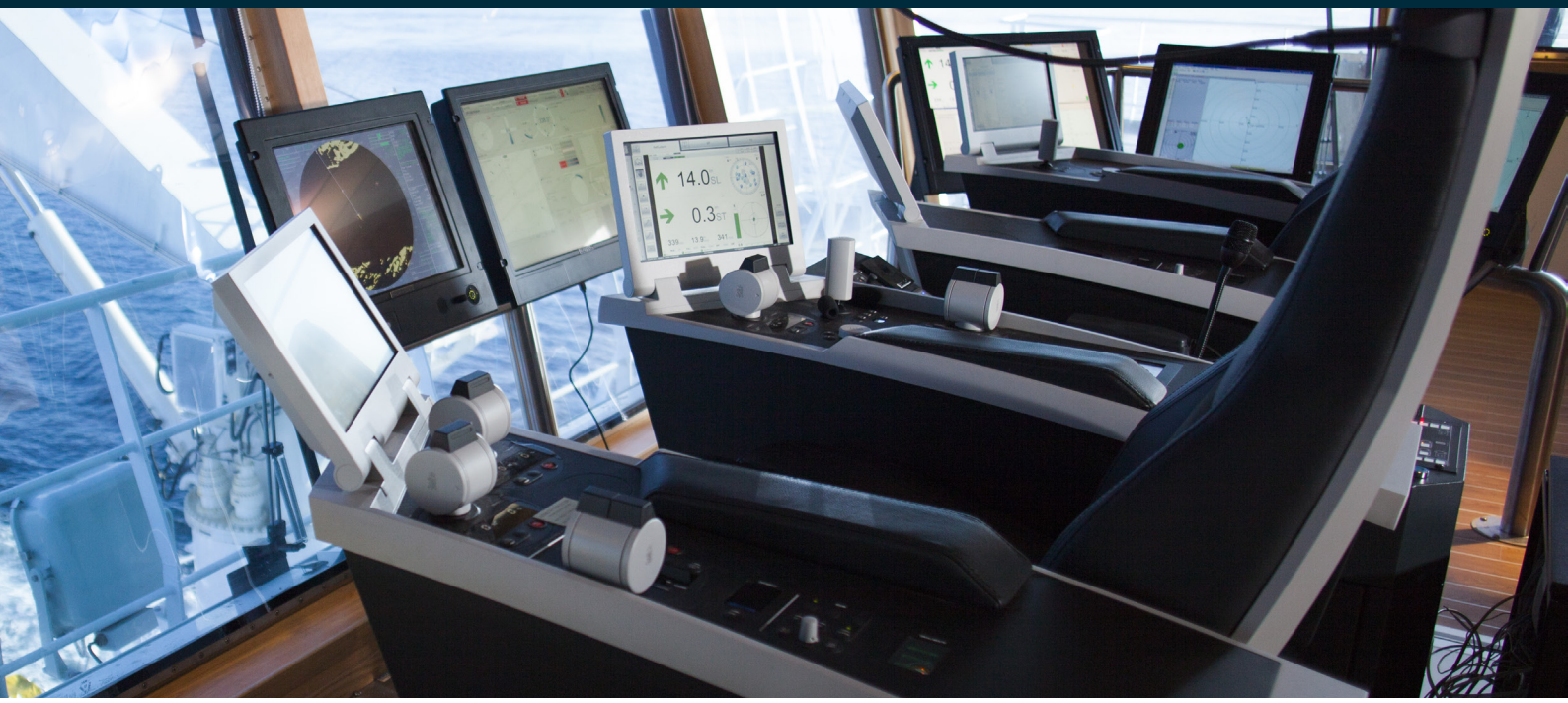
DPS 432

KONGSBERG



ALL GNSS SYSTEMS MADE AVAILABLE

DPS 432 is the next generation GNSS based position reference system moving availability and reability to the next level by utilising GPS, GLONASS, BeiDou and Galileo. DPS 432 features technology that is one step ahead by fully utilising corrections for all GNSS systems.

Trustworthiness of satellite navigation
DPS 432 integrates signals from GPS, GLONASS, BeiDou, Galileo and regional correction signals including SBAS, in addition to the new G4 service from Fugro. This ensures high flexibility for DP operations globally and makes the system ideally suited for complex operations in challenging environments. The system increases satellite availability, improves integrity monitoring and enables more precision under challenging signal tracking conditions. Alarms and warnings are activated if critical tolerances are exceeded and if position quality degrades. The system is tailor-made for DP operations and will enhance DP performance and provide 24/7 reliable operation year after year.

Networked architecture
The DPS NAV Engine® runs all critical computations independent from the DPS HMI to ensure continuous and reliable operation. DPS NAV Engine® runs in a safe mode protected from unintended user operations. Several DPS HMIs can be connected to the same DPS NAV Engine® in a networked architecture.

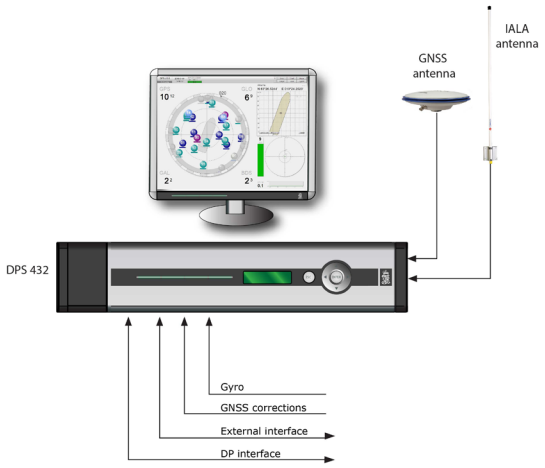
Multiple information layers
The system can integrate multiple layers of information, giving the DP operator unmatched opportunities for a customised visual presentation, including i.e., electronic chart, seabed maps, wellhead positions, static targets and AIS target information layers.

Ease-of-use HMI
DPS 432 features a highly intuitive HMI developed in close co-operation with experienced DP operators. This HMI enables the operators to assess the quality of their positioning quickly and effectively during operation. For better visibility under different light conditions, the operator can easily select between a set of colour palettes, including a well proven night display.

Multiple differential signals
DPS NAV Engine® comprises an all-in-one signal processing core with advanced algorithms and true parallel processing of all available signals including SBAS (e.g. WAAS, EGNOS, MSAS, GAGAN). DGNSS corrections from different sources are combined by the unique MULTIREF capability. There is no practical limitation to the number of reference stations handled by the DPS NAV Engine®. DPS 432 provides full decimetre accuracy with high precision services.

FEATURES DPS 432

- Combined GPS L1/L2/L5, GLONASS L1/L2, Beidou B1/B2, Galileo E1/E5 and SBAS receiver
- Dual frequency ionospheric compensation
- On-line monitoring and display of QC data
- Easy-to-use HMI tailored to safety critical DP operations
- Interface to heading sensors
- Lever arm compensation
- Automatic data recording with replay functionality
- Skyplot with satellite prediction and shadow sectors
- Target monitoring
- Speed view
- Electronic bearing line (EBL)
- Electronic chart/seabed maps
- AIS Interface
- Audible and visual alarms
- UKOOA compliant



TECHNICAL SPECIFICATIONS

PERFORMANCE[1]

High precision accuracy	10 cm, 95 % CEP
DGPS/DGLONASS accuracy	< 1 m, 95 % CEP
SBAS accuracy	< 1 m, 95 % CEP
Velocity accuracy	< 0.05 m/s, 95 % CEP
Output rate	1 Hz

INTERFACES

Serial ports	8 isolated ports, 6 configurable between RS-232 and RS-422
Ethernet/LAN	4
USB	3

DATA OUTPUTS

Message formats	NMEA 0183 v. 3.0, Proprietary
Message types	ABBDP, DPGGA, DTM, GBS, GGA, GLL, GNS, GRS, GSA, GST, GSV, RMC, VBW, VTG, ZDA

DATA INPUTS

DGPS/DGLONASS corrections	RTCM-SC104 ver. 2.2, 2.3, 3.0, 3.1, Seastar XP/XP2, Seastar G2/G4
Gyro compass	NMEA 0183 HDT, HRC, THS and Robertson LR22 BCD format

WEIGHT AND DIMENSIONS

DPS 432 unit	5.4 kg, 89 x 485 x 357 mm
GNSS antenna	0.5 kg, 69 mm x 185 mm
IALA beacon antenna	0.9 kg, 1100 mm

POWER

DPS 432 unit	100 to 240 V AC, 50/60 Hz, max 60 W
GNSS antenna	5 V DC from processing unit
IALA beacon antenna	10.2 V DC from processing unit

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range

DPS 432 unit	-15 to +55 °C (*)
GNSS antenna	-40 to +85 °C
IALA beacon antenna	-55 to +55 °C

(*) Recommended +5 to +40 °C

Humidity

DPS 432 unit	Max. 95 % non-condensing
GNSS antenna	Hermetically sealed
IALA beacon antenna	Hermetically sealed

Mechanical

Vibration	IEC 60945/EN 60945

Electromagnetic compatibility

Compliance to EMCD, immunity/emission	IEC 60945/EN 60945

PRODUCT SAFETY

Compliance to LVD, standard used	IEC 60950-1/EN 60950-1

1 *All accuracy specifications are based on real-life tests conducted in the North Sea under various conditions. Operation in other locations under different conditions may produce different results.*

Specifications subject to change without any further notice.

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