

DGPS 464



KONGSBERG



RADIO FOR RECEPTION OF DGPS CORRECTIONS IN BRAZIL

DGPS 464 is a specialized radio for reception of DGPS corrections distributed via UHF by a local service operated by Petrobras. DGPS 464 can be tuned to receive corrections from different reference stations dependent on the operating area.

DGPS operation is particularly challenging in Brazil due to the high level of ionospheric activity in the region. Scintillations or depletion of plasma bubbles may temporarily block GNSS satellites and satellite based correction links. This situation is connected to the solar sunspot activity. UHF transmission from local reference stations will not be affected by the ionospheric activity. Petrobras is currently operating a chain of reference stations distributing DGPS corrections via UHF. DGPS 464 has been developed especially to receive and decode the corrections distributed by Petrobras.

DGPS 464 is built as a 19-inch rack module, and is adapted to applications such as the DPS and DARPS range of products. The DGPS 464 uses Ethernet for continuous output of differential corrections in standard RTCM format. For older DPS systems, one serial port is available for output of corrections. A webservice provides frequency and sensitivity programming via Ethernet.

TECHNICAL SPECIFICATIONS

PERFORMANCE

Frequency band	430 to 470 MHz
Sensitivity	< -110 dBm for BER 10 ⁻⁵

INTERFACES

Communication ports	1 Ethernet and 1 serial RS-232
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WEIGHTS AND DIMENSIONS

DGPS 464 Unit	3.0 kg, 485 x 44 x 346 mm
UHF antenna	1.6 kg, height 2016 mm

POWER SPECIFICATIONS

DGPS 464 Unit	
Input voltage	100 to 240 V AC, 50/60 Hz
Power consumption	Typical 5 W

UHF ANTENNA

Power consumption	Max. 500 W (at 50°C ambient temp.)
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ENVIRONMENTAL SPECIFICATIONS

Operating temperature range	
DGPS 464 Unit	-15 °C to +55 °C ¹
UHF antenna	-55 °C to +60 °C (dry)

Operating humidity

DGPS 464 Unit	Max. 95 % non-condensing
UHF antenna	Hermetically sealed

Electromagnetic compatibility

Immunity/radiation	IEC 60945/EN 60945
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PRODUCT SAFETY

Low voltage	IEC 60950-1/EN 60950-1
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¹ Recommended +5 °C to +40 °C

Specifications subject to change without any further notice.

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