

DATASHEET
for
Glide Path Indicator
Product GPI H20001-00-006 / Naval Applications



The powerful GPI light beams enable the pilot to easily locate the helideck from approx. 5 NM and will guide the helicopter to a position above the landing area. The light beams consist of three different vertical sectors: A steady green sector in the center that indicates the correct approach angle of abt. 4°, a yellow / amber, slow flashing upper sector above the green sector and a red, fast flashing lower sector warning the pilot of a dangerously low approach angle. The two fully redundant LED driven light beams are stabilized to the horizon with an accuracy of $\pm 0.3^\circ$ using an internal motion sensor (Inertial Measurement Unit IMU) and powerful servo actuators to compensate both, roll and pitch motions up to $\pm 45^\circ$, irrespective of the relevant helicopter approach heading.

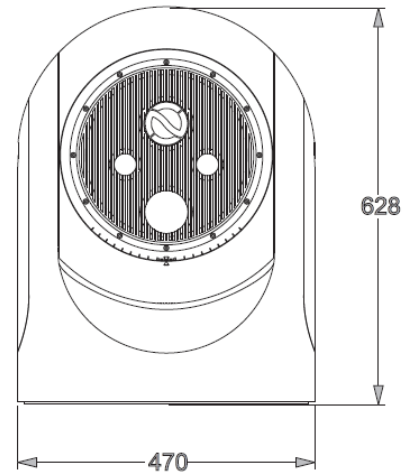
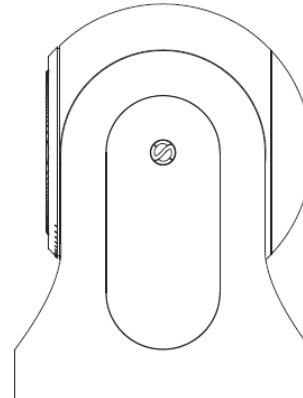
System integrity and operational reliability is controlled by Optonaval's internal electronics combining multiple sensors measuring temperature, humidity, and electric current, providing 24/7 monitoring of the GPI's status. In that respect, the GPI will show an upcoming malfunction before it actually fails. Easily exchangeable standard dry agent cartridges provide effective absorption of residual humidity. Nitrogen filling, as alternative mode of humidity control, is available as optional feature.

Also as an optional feature, a high-resolution camera with motorized zoom facing towards the approaching helicopter can assist visual surveillance of helideck landing operations. When not used as GPI, the camera can be integrated in the CCTV system and act as pan / tilt camera for additional observations.

All data reflect the current state of the technology and should therefore be regarded with reservation.

PRODUCT SPECIFICATION

ELECTRICAL SPECIFICATIONS	
Supply voltage	48 V DC
Power	250 W rated / 350 W max.
OPERATING CONDITIONS	
Ambient temperature	-25°C to 45°C
Ingress protection level	IP66
Shock	acc. to MIL-STD-810G / BV 0230 (X, Y Axis 25G / Z Axis 45G)
Vibration	acc. to MIL-STD-810G / BV 0240
EMC	acc. to MIL-STD-461G / VG 95373
NVIS compatible	acc. to MIL-STD-3009 Type II class B
MECHANICAL SPECIFICATIONS	
Dimensions	Ø470x628 mm
Weight	approx. 49 kg
Housing color	RAL Classic
Housing material	sea water resistant aluminum alloy
Surface coating	anodized & powder coated
Front glass material	Mineral glass
OPTICAL/LIGHT SPECIFICATIONS	
Light source	redundant 2 x LED Light Engine
Light color	type FYGR or customer specific
Light standard	acc. to MPP-02.3.1 EdA V2
Beam angle	25° horizontal (12,5 PS & SB) 5° vertical (YE, high) 3° vertical (CGN, command) min. 2° vertical (RD, low)
Beam intensity	2 x min. 100 cd (each sector)
ADDITIONAL DOCUMENTS	
Installation Drawing	H20001-50-006_InstallationDrawing
Installation Manual	H20001-51-006_InstallationManual
Operating Manual	H20001-81-006_OperatingManual
Maintenance Manual	H20001-82-006_MaintenanceManual



APPLICATIONS

ON-part-no.	Product type
H20001-00-006	Navy Variant