

Active Receiving Antenna for the 1575 MHz NAVSTAR GPS Satellite Navigational System for Maritime and Landmobile Use

DESCRIPTION

- Flat-pack GPS-antenna for fixed installations.
- Full hemispherical coverage.
- Built-in high-gain, low-noise amplifier.
- Right-hand circular polarization (RHCP).
- Available in black or white, see model survey.
- 3 V or 5 V supply voltage (12 V available on request).
- DC supply via RF-connector.
- EMC tested to IEC 801 and IEC 255.
- Provided with FME-male, TNC-female connector, or models with permanently attached 0.15 m cable with FME-male connector, see model survey.
- Wide range of FME-accessories available.



ORDERING

Type	Product No.	Description
GPS 2000B-FME-5V	112000026	Black
GPS 2000B-FME-3V	112000029	Black
GPS 2000W-FME-5V	112000024	White
GPS 2000W-FME-3V	112000023	White
GPS 2000W-TNC-3V	112000019	White
GPS 2000W-TNC-5V	112000027	White
GPS 2000B-TNC-5V	112000028	Black
GPS 2000B-TNC-3V	112000032	Black
GPS 2000W-P0.15-5V	112000071	White
GPS 2000B-P0.15-5V	112000072	Black
GPS 2000W-P0.15-3V	112000073	White
GPS 2000B-P0.15-3V	112000074	Black

SPECIFICATIONS

Electrical	
Model	GPS 2000
Frequency	1575 MHz
Antenna Type	Active patch antenna
Polarisation	Circular
Pattern Type	Hemispherical
Impedance	50 Ω
Axial Gain	28 dBi (typ.)
Cross Polar Attenuation	> 10 dB (typ.)
Selectivity	> 45 dB down @ +/- 45 MHz

Mechanical	
Connection(s)	FME male, TNC female or models with 0.15 m RG 316 permanently attached cable with FME (male) connector, see ordering designations
Materials	Cu-nite brass, seawater resistant Lexan
Installation Torque	8.5 +/- 1 Nm
Colour	Black or white, see ordering designations
Dimensions	55mm diameter
Height	16 mm / 0.63 in.
Weight	0.12 kg / 0.26 lb
Mounting	14 mm / 0.55" dia. hole
Mounting Plate Thickness	0.7 - 4.5 mm / 0.03 - 0.18 in.

GPS Antenna	
P1dB (GPS Amplifier)	Approx. +7 dBm
Noise Figure (GPS Amplifier)	< 1 dB (typ.)
Gain (GPS Amplifier)	> 30 dB (typ.)
SWR (GPS Amplifier)	< 2.0:1
Power Supply (GPS)	5 ± 0.5 VDC (3 V resp. 12 V on request)
Current Consumption (GPS Amplifier)	0.02 mA

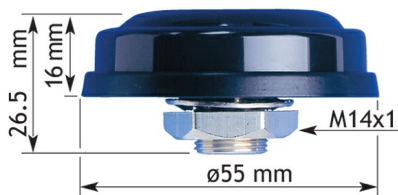
Environmental	
Operating Temperature Range	-50 °C to +70 °C

ADDITIONAL DATA

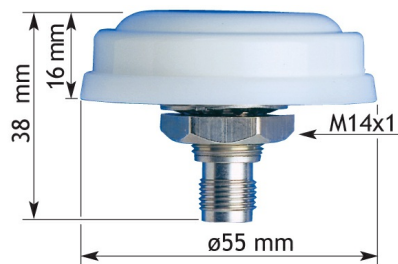
GPS 2000B-P0.15 AND GPS 2000W-P0.15



FME-VERSION



TNC-VERSION



MODELS WITH PERMANENTLY ATTACHED CABLE



MOUNTING

The gasket should be entirely supported by the mounting plane.

Do not use sealer on rubber gasket or other places.

FME-SYSTEM ACCESSORIES

FME-CABLES

TYPE	PRODUCT NO.
1 m FME	130000437
2 m FME	130000447
3 m FME	130000457
4 m FME	130000466
5 m FME	130000474
6 m FME	130000483
1 m FME-EFME	130000526
2 m FME-EFME	130000527
3 m FME-EFME	130000528
4 m FME-EFME	130000529
5 m FME-EFME	130000530
6 m FME-EFME	130000531
4 m FME-white	110000064
6 m FME-white	110000066
12 m FME-white	110000068
18 m FME-white	110000069

FME-CONNECTORS

TYPE	PRODUCT NO.
FME-FME	130000583
FME-P (Prolongation)	130000565
FME-N	130000571
FME-FSMA (Female-SMA)	130000578
FME-BNC	130000566
FME-TNC	130000569
FME-UHF	130000572
FME-MUHF (Mini-UHF)	130000573
FME-EMUHF (Elbow-MUHF)	130000582
FME-EBNC (Elbow-BNC)	130000580
FME-ETNC (Elbow-TNC)	130000581
FME-SMA	130000577
MFME-MSMC	130001573

For further information about other types of FME-cables and FME-connectors, please compare the cable and connector data sheets under accessories.

ACCESSORIES

Stainless steel angle bracket for fixation of GPS 2000... antennas. (To be ordered separately: MB 2000 clamp). Not recommended for GPS 2000...-P0.15 types.

VERTICAL RADIATION PATTERN

TYPICAL RESPONSE CURVES

