

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.)
VSWR (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

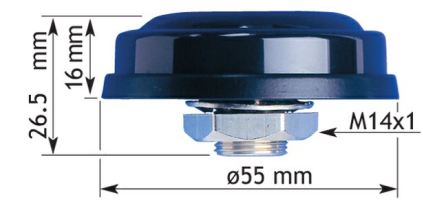
FME-SYSTEM ACCESSORIES

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

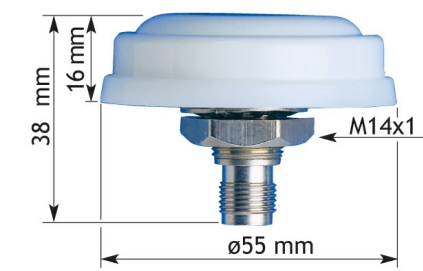
FME-CONNECTORS	
TYPE	PRODUCT NO.
FME-FME	130000583
FME-P (Prolongation)	130000565
FME-N	130000571
FME-FSMA (Female-SMA)	130000578
FME-BNC	130000566
FME-TNC	130000569
FME-UHF	130000572
FME-MUHF (Mini-UHF)	130000573
FME-EMUHF (Elbow-MUHF)	130000582
FME-EBNC (Elbow-BNC)	130000580
FME-ETNC (Elbow-TNC)	130000581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

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.

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 REPSONSE CURVES

