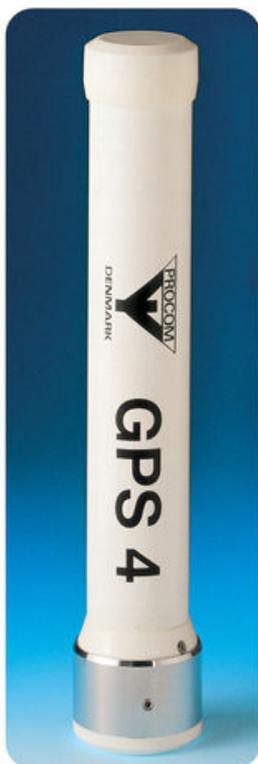


## GPS 4/...

Active Receiving Antenna for the 1575 MHz NAVSTAR GPS Satellite Navigational System

### DESCRIPTION

- Full hemispherical coverage due to quadrifilar helix antenna element.
- Built-in high gain, low noise amplifier.
- Input filter for thorough RF-overload protection.
- Right-hand circular polarisation (RHCP).
- High rejection of cross-polarised reflections prevents fading caused by multipath propagation.
- 5 V supply voltage (3 V respectively 12 V available on request).
- DC supply via RF-connector.
- EMC tested to IEC 801 and IEC 255.
- Total design carried out to make the antenna withstand tough environments.
- Comprehensive range of accessory mounting brackets available.



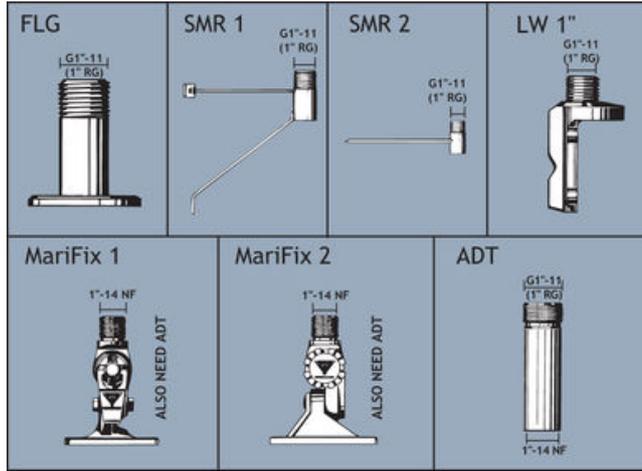
TYPE NO.	SUPPLY VOLTAGE
GPS 4	5 V DC (4.5 - 5.5 V)
GPS 4/3 V	3 V DC (3 - 3.5 V)
GPS 4/12 V	12 V DC (9 - 15 V)

### SPECIFICATIONS

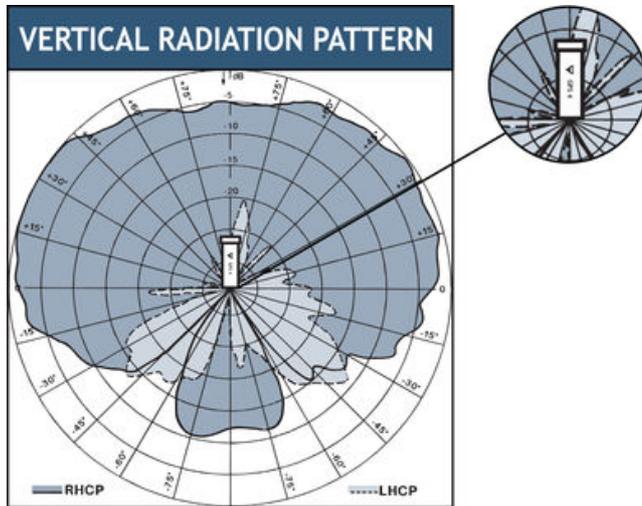
ELECTRICAL General Specifications	
MODEL	GPS 4/...
ANTENNA TYPE	Quadrifilar helix active antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 $\Omega$
POLARIZATION	Circular right-hand
COVERAGE	Hemispherical
GAIN (in axial direction)	> 32 dBi
CROSSPOLARISATION ATT.	> 10 dB
Built-in Amplifier	
GAIN	> 30 dB
NOISE FIGURE	< 3 dB (incl. input filter). Typ. approx. 3 dB
1 dB COMPRESSION POINT	> 10 dBm
SELECTIVITY	> 20 dB down @ $\pm$ 100 MHz
OUT OF BAND ATTENUATION	0.03 - 1 GHz : > 40 dB down 2 - 10 GHz : > 40 dB down
SWR (output)	< 2.0
SUPPLY VOLTAGE	GPS 4: 5 $\pm$ 0.5 V DC GPS 4/3 V: 3-3.5 V DC GPS 4/12V: 9-15 V DC
CURRENT CONSUMPTION	Approx. 44 mA
EMC	Full protection (IEC 801, IEC 255)
MECHANICAL	
MATERIALS	Antenna dome: Weather-resistant low-loss plastic
ANTENNA COLOUR	Marine white
INSULATION	Connector ground terminal galvanically insulated from the mounting hardware
WIND SURFACE	Approx. 0.0072 m <sup>2</sup>
MAX. WIND SPEED	200 km/h
WIND LOAD	Approx. 9.6 N @ 150 km/h
TEMP. RANGE	-50° C $\rightarrow$ +70° C
CONNECTOR	FME-male (pin) (can be supplied with TNC upon request)
SUGGESTED DOWNLEAD CABLE	< 10 m: RG 58 10 - 30 m: RG 213
TOTAL HEIGHT	Approx. 23 cm
ANTENNA DIA.	33 mm
WEIGHT	Approx. 150 g
MOUNTING	Vertical on 1" water pipe or on PROCOM 1" mounting brackets (see accessories below)

## ACCESSORIES

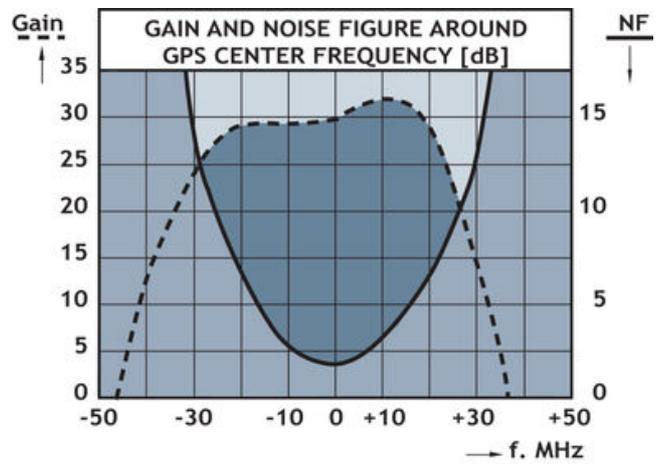
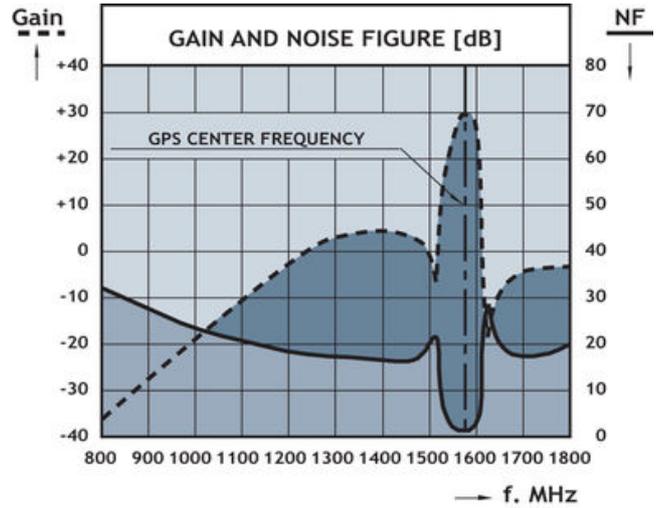
(To be ordered separately)



## RADIATION PATTERN



## TYPICAL RESPONSE CURVES



## FME-SYSTEM ACCESSORIES

FME-CABLES	
LENGTH	TYPE NO.
1 m	1 m FME
2 m	2 m FME
3 m	3 m FME
4 m	4 m FME
5 m	5 m FME
6 m	6 m FME
4 m white	4 m FME-white
6 m white	6 m FME-white
12 m white	12 m FME-white
18 m white	18 m FME-white

FME-CONNECTORS	
CONNECTOR	ORDER NO.
FME-FME	FME-FME
Prolongation	FME-P
N	FME-N
FSMA	FME-FSMA
BNC	FME-BNC
TNC	FME.TNC
UHF	FME-UHF
Mini-UHF	FME-MUHF
Elbow-MUHF	FME-EMUHF
Elbow-BNC	FME-EBNC
Elbow-TNC	FME-ETNC
SMA	FME-SMA

For further information about other types of FME-cables please compare the cable data sheets under accessories in our catalogue.



PROCOM A/S reserve the right to amend specifications without prior notice.

29/11/2010