

GPS 4-TNC

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.
- ★ 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.

SPECIFICATIONS:

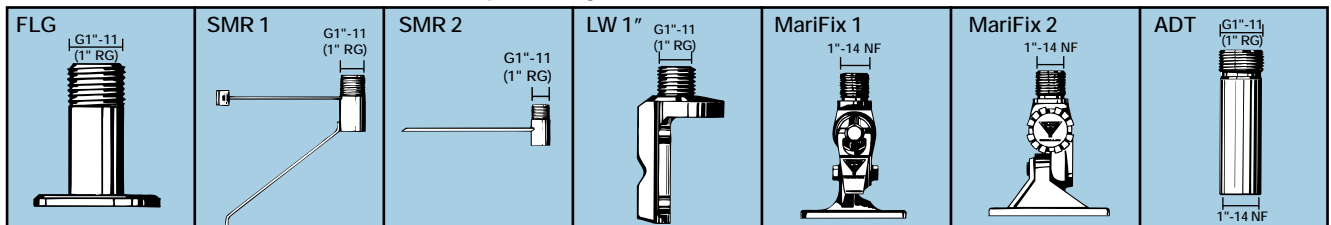
ELECTRICAL	
General specifications	
MODEL	GPS 4-TNC
ANTENNA TYPE	Quadrifilar helix active antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Circular right-hand
COVERAGE	Hemispherical
GAIN (in axial direction)	> 32 dBi
CROSS-POLARISATION ATT.	> 10 dB
Built-in amplifier	
GAIN	> 30 dB
NOISE FIGURE	< 3 dB (incl. input filter). Typ. approx. 2.5 dB
1 dB COMPRESSION POINT	> 10 dBm
SELECTIVITY	> 20 dB down at ± 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-TNC: 5±0.5 VDC
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 is galvanically insulated from the mounting hardware
WIND SURFACE	Approx. 0.0072 m ²
MAX. WIND SPEED	200 km/h
WIND LOAD	Approx. 9.6 N (at 150 km/h)
TEMP. RANGE	-30° C i + 70° C
CONNECTOR	TNC-female
SUGGESTED DOWNLEAD CABLE	< 10 m : RG 58 > 10 m : RG 213
TOTAL HEIGHT	Approx. 23 cm
WEIGHT	Approx. 150 g
MOUNTING	On 1" water pipe or on PROCOM 1" mounting brackets (see accessories below)



MODEL SURVEY:

TYPE NO.	SUPPLY VOLTAGE
GPS 4-TNC	5 V DC (4.5-5.5 V)

ACCESSORIES: (to be ordered separately)



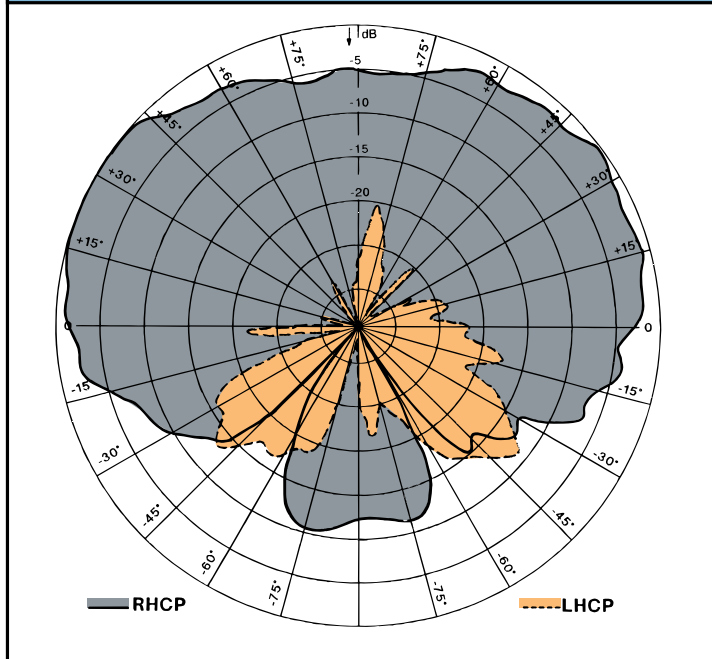
PROCOM A/S reserve the right to amend specifications without prior notice.

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VERTICAL RADIATION PATTERN



TYPICAL RESPONSE CURVES:

