

GPS-C 2R/GSM/FM/...

GPS Antenna with a 1/4 λ Whip with Shock Spring for the 160 MHz, EGSM and FM Bands

DESCRIPTION

- GPS-antenna for fixed installations.
- External antenna whip mounted on the GPS-Combi mount.
- Full hemispherical coverage.
- Built-in high gain, low noise amplifier.
- Right-Hand Circular Polarisation (RHCP).
- 5 V supply voltage (3 V respectively 12 V available on request).
- DC supply via RF-connector.
- Black-chromed, conical stainless steel whip.
- Sturdy, general-purpose 1/4 λ antenna in professional quality.



ORDERING DESIGNATIONS:

Can also be supplied factory-cut for the required frequency (between 144-175 MHz).

SPECIFICATIONS FOR WHIP

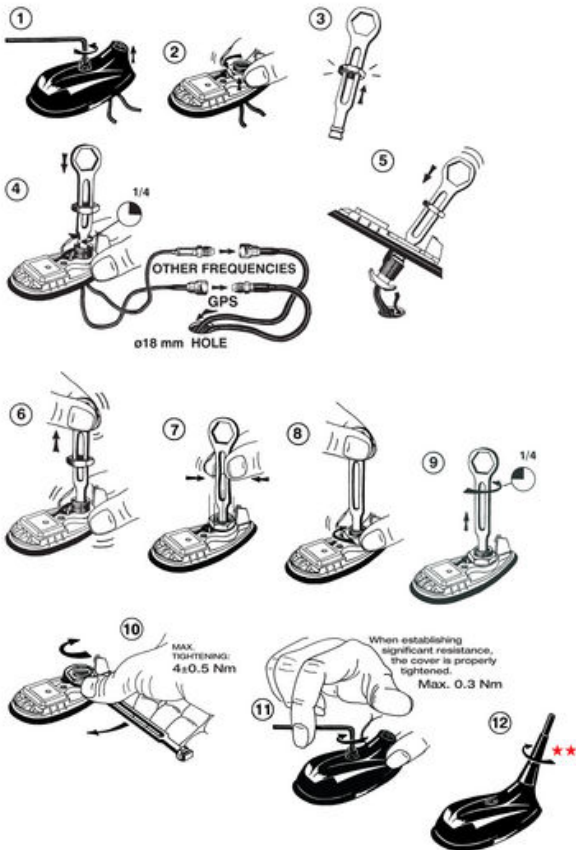
ELECTRICAL	
MODEL	GPS-C 2R/GSM/FM/...
ANTENNA TYPE	1/4 λ mobile antenna
FREQUENCY	Tunable by cutting within: 144–175 MHz also receives EGSM (880-960 MHz) and FM-radio (88–108 MHz)
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	Approx. 0 dB (acc. to EIA RS-329-1) for the 160 MHz band
MAX. POWER	25 W
MECHANICAL	
MATERIALS	Whip: Black-chromed, conical stainless steel Black-chromed brass Spring: Black-chromed stainless steel
COLOUR	Black
HEIGHT	Approx. 450 mm (dep. on frequency)
WEIGHT	Approx. 60 g (dep. on frequency)
MOUNTING	On the GPS-Combi mount

SPECIFICATIONS FOR GPS-COMBI MOUNT

ELECTRICAL General specifications	
MODEL	GPS-COMBI MOUNT
ANTENNA TYPE	Active patch antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Circular right-hand
COVERAGE	Hemispherical
GAIN	28 dBic in axial direction (typ.)
CROSS-POLARISATION ATT.	> 10 dB (typ.)
BUILT-IN AMPLIFIER	
GAIN	> 30 dB (typ.)
NOISE FIGURE	< 1 dB (typ.)
P _{1dB}	Approx. +7 dBm
SELECTIVITY	> 45 dB down at ± 45 MHz
SWR (output)	≤ 2.0
SUPPLY VOLTAGE	5 ± 0.5 VDC (3 V resp. 12 V on request)
CURRENT CONSUMPTION	Approx. 25 mA
MECHANICAL (only for the GPS-part)	
MATERIALS	Cu-nite brass Stainless steel Reinforced thermoplastic
ANTENNA COLOUR	Black
TEMP. RANGE	-35° C → +75° C
CONNECTOR	FME (male for GPS) + FME (female for mobile antenna)
RECOMMENDED INSTALL. TORQUE	4 ± 0.5 Nm
DIMENSIONS(H x L)	Approx. 30 x 89 mm
ROOF THICKNESS	Max. 2.0 mm
WEIGHT	Approx. 114 g
MOUNTING	ø18 mm dia. hole (For roof thickness 2.5 mm mounting hole should be ø18.5 mm dia.) Tools for mounting included

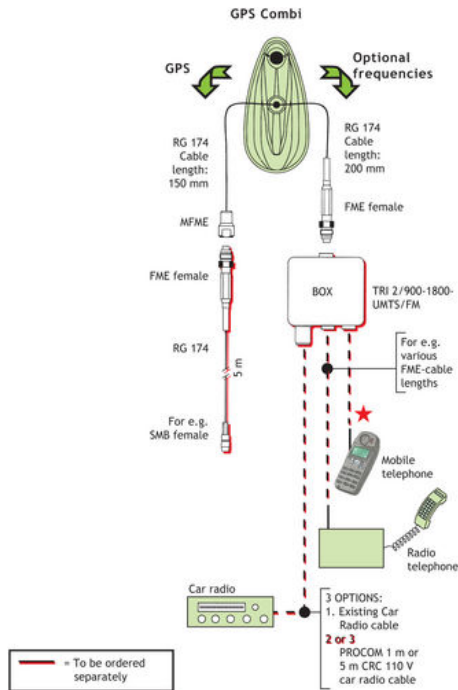
INSTALLATION

MOUNTING INSTRUCTIONS



Do not use sealer on rubbergasket or other places.

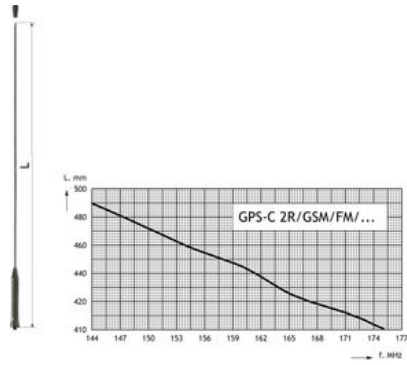
CABLE MOUNTING



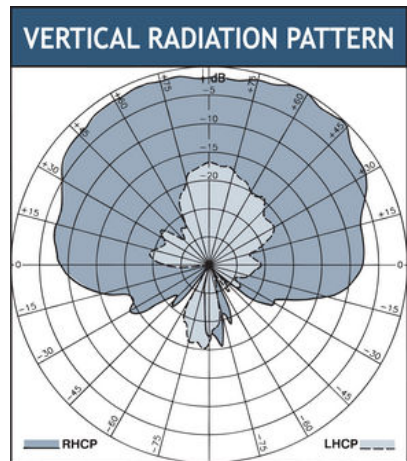
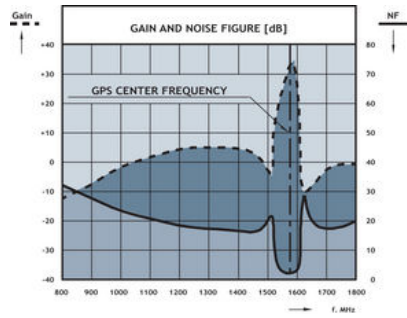
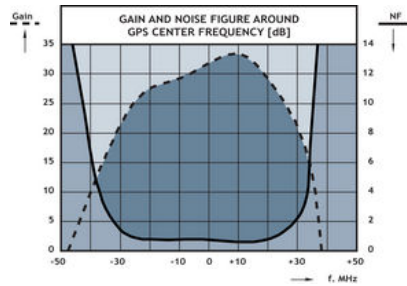
★ FME-Connector suitable for Mobile telephone in question. ★★ The whip should always be dismantled during car wash.

TUNING

The antenna should always be tuned using an SWR-meter. The cutting diagram below serves as a guide for this procedure.



TYPICAL RESPONSE CURVE



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

16/01/2009