

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.

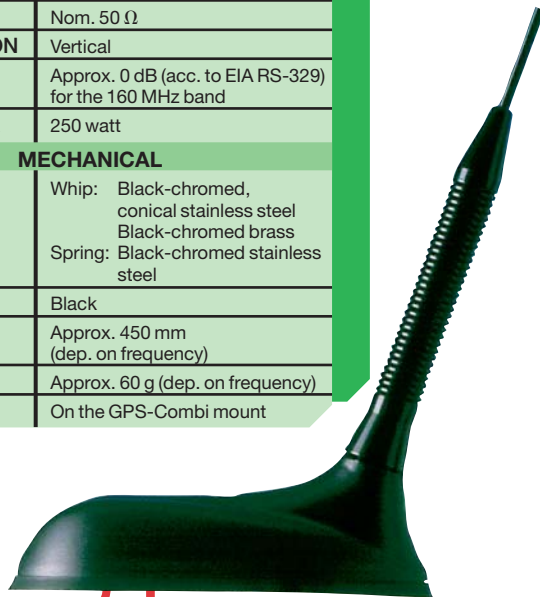


SPECIFICATIONS FOR GPS-COMBI MOUNT:

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) for the 160 MHz band
MAX. POWER	250 watt
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

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 dBi 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	∅18 mm dia. hole (For roof thickness 2.5 mm mounting hole should be ∅18.5 mm dia.) Tools for mounting included

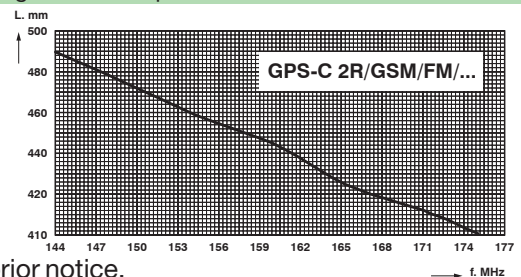


ORDERING DESIGNATIONS:

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

TUNING:

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

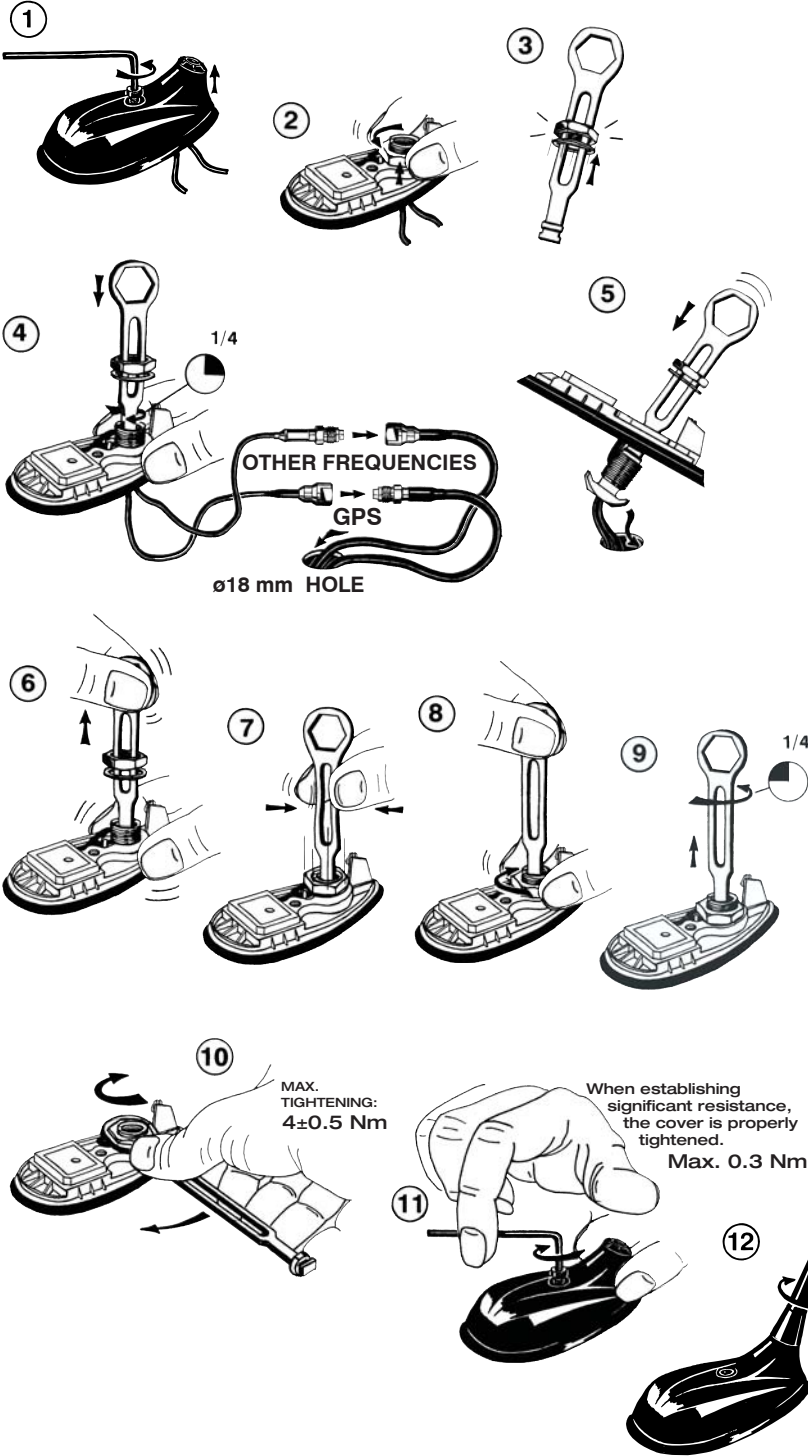


PROCOM A/S reserve the right to amend specifications without prior notice.

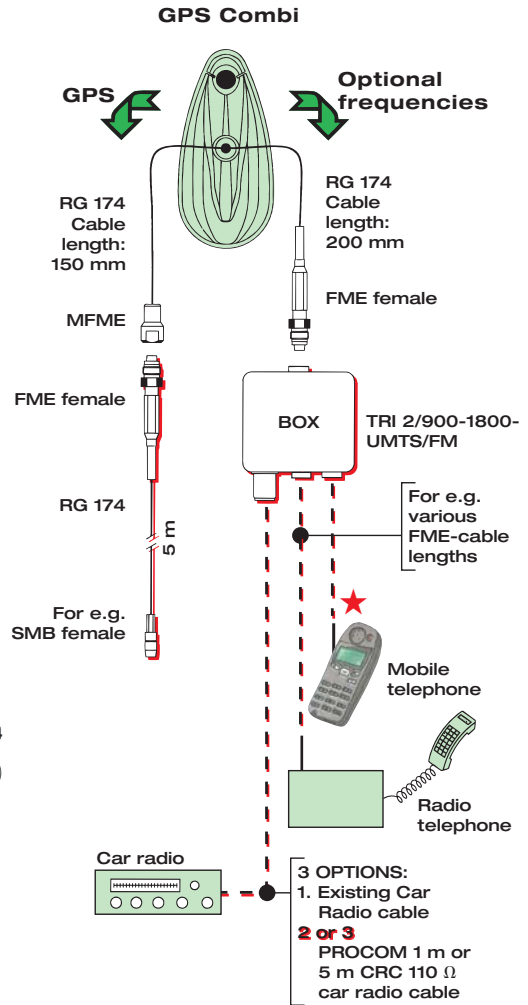
GPS-C 2R/GSM/FM/... Installation



MOUNTING INSTRUCTIONS:



CABLE MOUNTING:



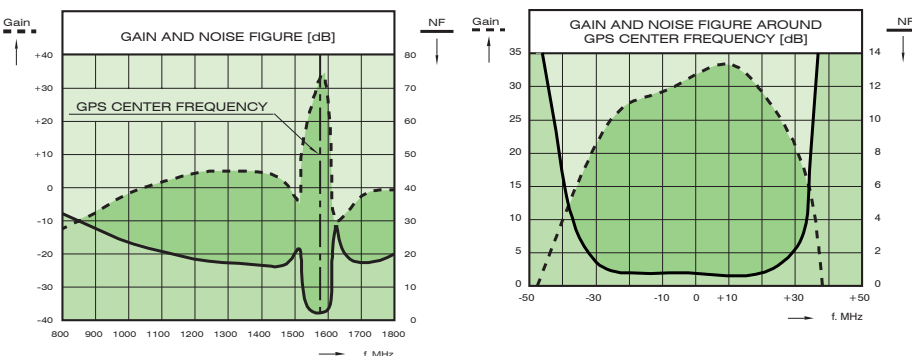
— = To be ordered separately

★ FME-Connector suitable for Mobile telephone in question.

★★ The whip should always be dismantled during car wash.

Do not use sealer on rubber gasket or other places.

TYPICAL RESPONSE CURVES:



VERTICAL RADIATION PATTERN

