

GPS-C HX 2/...

GPS Antenna with a $1/4 \lambda$ Helical Antenna for the 160 MHz Band

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.
- Flexible, conical steel helix moulded in flexible thermoplastic rubber.
- Reduced-size $1/4 \lambda$ helical antenna whip.



ORDERING DESIGNATIONS

When ordering, please state the required frequency (144–175 MHz).

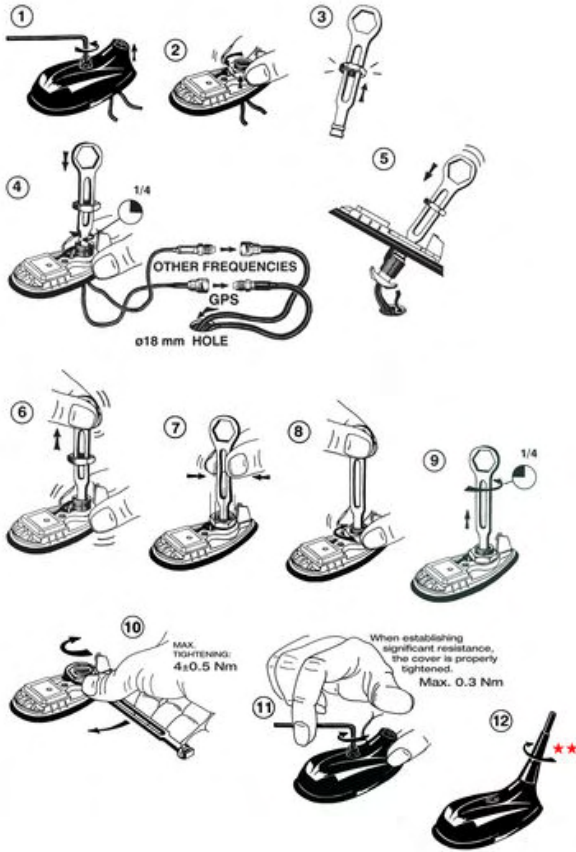
SPECIFICATIONS FOR WHIP

ELECTRICAL	
MODEL	GPS-C HX 2/...
ANTENNA TYPE	Shortened $1/4 \lambda$ helical antenna
FREQUENCY	Tunable by cutting within: 144–175 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	Approx. -3 dB (acc. to EIA RS-329-1)
MAX. POWER	10 W
MECHANICAL	
MATERIALS	Steel helix moulded in flexible thermoplastic rubber Black-chromed brass
COLOUR	Black
HEIGHT	Approx. 130 mm (dep. on freq.)
WEIGHT	Approx. 34 g (dep. on freq.)
MOUNTING	On the GPS-Combi mount

SPECIFICATIONS FOR GPS-COMBI MOUNT

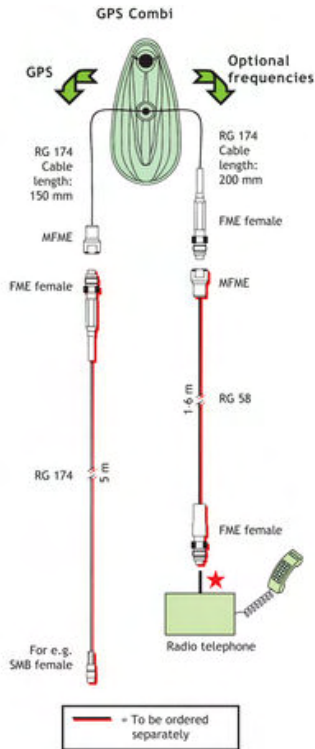
ELECTRICAL General specifications	
MODEL	GPS-COMBI MOUNT
ANTENNA TYPE	Active patch antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Circular right-hand
COVERAGE	Hemispherical
GAIN	28 dBic in axial direction (typ.)
CROSS-POLARISATION ATT.	> 10 dB (typ.)
BUILT-IN AMPLIFIER	
GAIN	> 30 dB (typ.)
NOISE FIGURE	< 1 dB (typ.)
P 1dB	Approx. +7 dBm
SELECTIVITY	> 45 dB down at ± 45 MHz
SWR (output)	≤ 2.0
SUPPLY VOLTAGE	5 \pm 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 \rightarrow +75° C
CONNECTOR	FME (male for GPS) + FME (female for mobile antenna)
RECOMMENDED INSTALL. TORQUE	4 \pm 0.5 Nm
DIMENSIONS(H x L)	Approx. 30 x 89 mm
ROOF THICKNESS	Max. 2.0 mm
WEIGHT	Approx. 114 g
MOUNTING	\varnothing 18 mm dia. hole (For roof thickness 2.5 mm mounting hole should be \varnothing 18.5 mm dia.) Tools for mounting included

MOUNTING INSTRUCTIONS



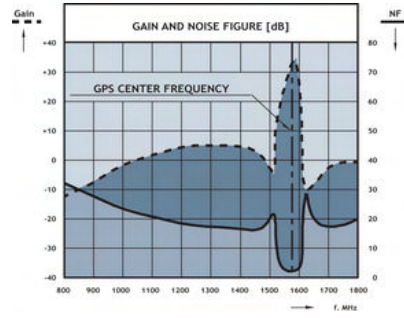
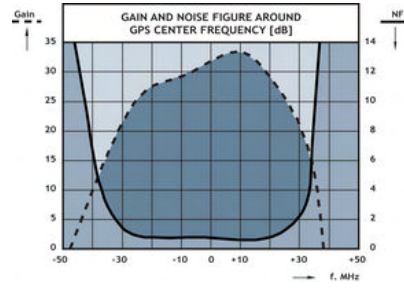
Do not use sealer on rubbergasket or other places.

CABLE MOUNTING

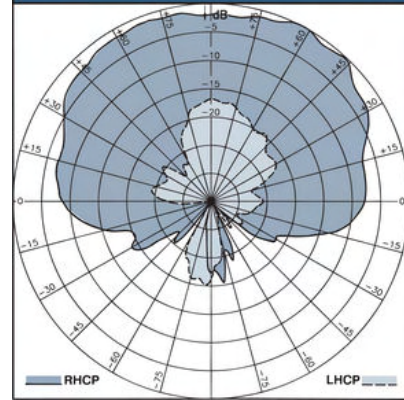


★ FME-Connector suitable for Mobile telephone in question. ★ The whip should always be dismantled during car wash.

TYPICAL RESPONSE CURVE



VERTICAL RADIATION PATTERN



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

16/01/2009