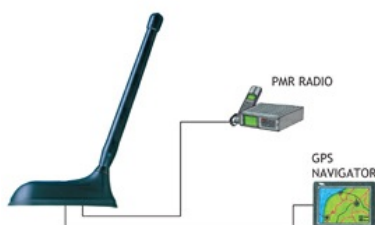


GPS Antenna with a $\frac{1}{4} \lambda$ Helical Antenna for the 160 MHz Band

DESCRIPTION

- > External antenna whip mounted on the GPS-Combi mount.
- > GPS-antenna for fixed installations.
- > Flexible, conical steel helix moulded in flexible thermoplastic rubber.
- > Reduced-size $\frac{1}{4} \lambda$ helical antenna whip.
- > Easily removable whip for car wash.
- > Full hemispherical coverage.
- > Built-in high gain, low noise amplifier.
- > Right-Hand Circularly Polarized antenna (RHCP).
- > 5 V supply voltage (3 V respectively 12 V available on request).
- > DC supply via RF-connector.

CONNECTION DIAGRAM



SPECIFICATIONS

Electrical	
Model	GPS-C HX2/FQ
Frequency	Tunable by cutting within: 144 - 175 MHz
Antenna Type	Shortened $\frac{1}{4} \lambda$ helical antenna
Max. Input Power	10 W
Polarisation	Vertical
Impedance	50 Ω
Gain (EIA RS-329-1)	-3 dB
Mechanical	
Connection(s)	FME (male for GPS) + FME (female for mobile antenna)
Materials	Steel helix moulded in flexible thermoplastic rubber Black-chromed brass
Colour	Black
Max. Roof Thickness	2.5 mm
Height	Approx. 130 mm / 5.12 in.
Weight	Approx. 0.034 kg / 0.07 lb.
Mounting	On the GPS-Combi mount

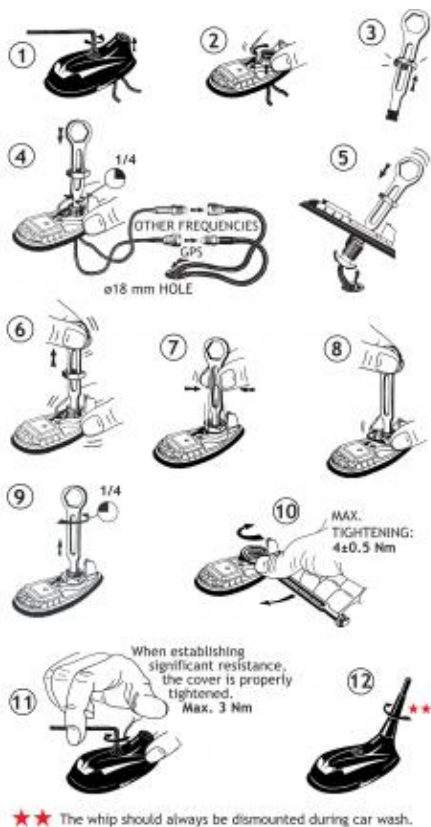


GPS Antenna	
P1dB (GPS Amplifier)	Approx. +7 dBm
Gain (GPS)	28 dBic in axial direction (typ.)
Antenna Type (GPS)	Active patch antenna
Noise Figure (GPS Amplifier)	< 1 dB (typ.)
Cross Polar Discrimination (GPS)	> 10 dB (typ.)
Gain (GPS Amplifier)	> 30 dB (typ.)
VSWR (GPS Amplifier)	< 2.0:1
Operating Temperature Range (GPS)	-35 to 75 °C
Selectivity (GPS)	> 45 dB down @ ± 45 MHz
Installation Torque (GPS)	4 \pm 0.5 Nm
Frequency (GPS)	1575 MHz
Weight (GPS)	0.114 kg
Power Supply (GPS)	5 \pm 0.5 VDC (3 V resp. 12 V on request)
Current Consumption (GPS Amplifier)	Approx. 25 mA
Dimensions (GPS)	Approx. 30 x 89 mm
Colour (GPS)	Black
Polarisation (GPS)	RHCP
Impedance (GPS)	50 Ω
Materials (GPS)	Cu-nite brass Stainless steel Reinforced thermoplastic

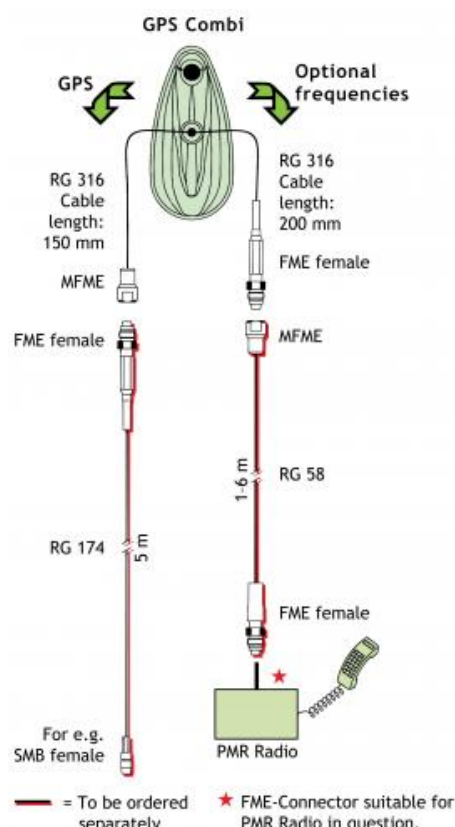
ORDERING

Model	Product No.
GPS-C HX2/FQ	132000049

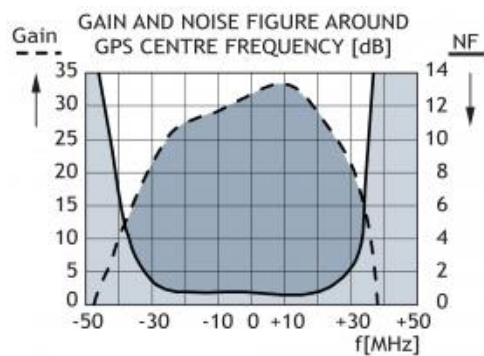
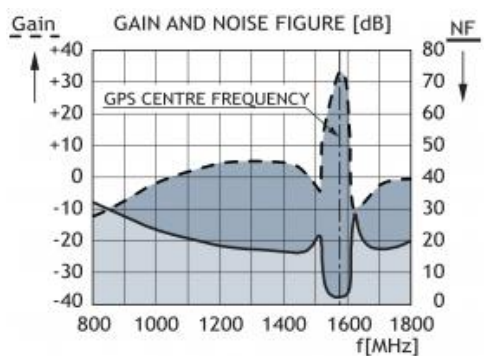
MOUNTING INSTRUCTIONS



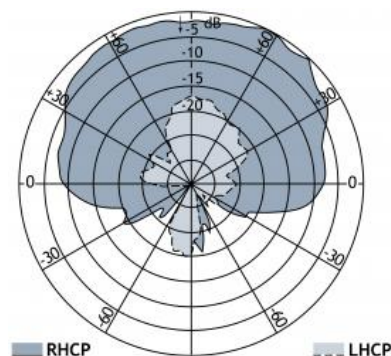
CABLE MOUNTING



TYPICAL RESPONSE CURVES



VERTICAL RADIATION PATTERN



EU DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type GPS-C HX-2/FQ is in compliance with EU Directive 2014/53/EU. The full text of the EU Declaration of Conformity is available at:

<https://amphenolprocom.com/images/shop/catalog/pdf-for-catalogues/Declaration-of-Conformity-GPS-C-1.pdf>