

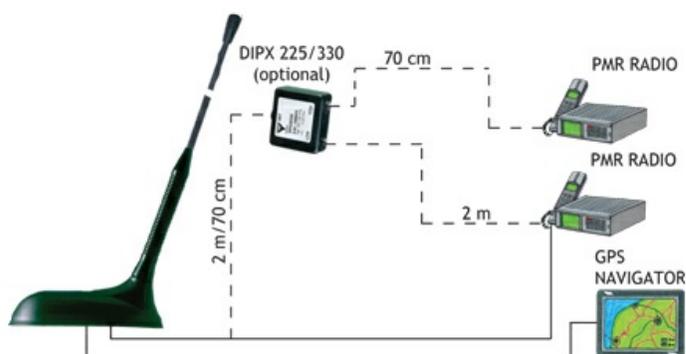
## GPS Antenna with Whip with Shock Spring for the 160 MHz and 450 MHz Bands

### DESCRIPTION

- External antenna whip mounted on the GPS-Combi mount.
  - Sturdy, general-purpose  $\frac{1}{4}$   $\lambda$  antenna in professional quality.
  - Easily removable whip for cleaning in car-washing machine.
- GPS-antenna for fixed installations.
  - 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.
- When ordering the antenna, please state the centre frequency on each band.



### CONNECTION DIAGRAM



### SPECIFICATIONS

Electrical	
Model	GPS-C 2/70/FQ/FQ
Frequency	160 MHz band: freq. to be stated within: 144...175 MHz 450 MHz band: freq. to be stated within: 380...470 MHz
Antenna Type	Mobile antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 $\Omega$
Bandwidth	160 MHz : 8 MHz @ VSWR $\geq$ 2.0 450 MHz : 15 MHz @ VSWR $\leq$ 2.0
Gain (EIA RS-329-1)	0 dB

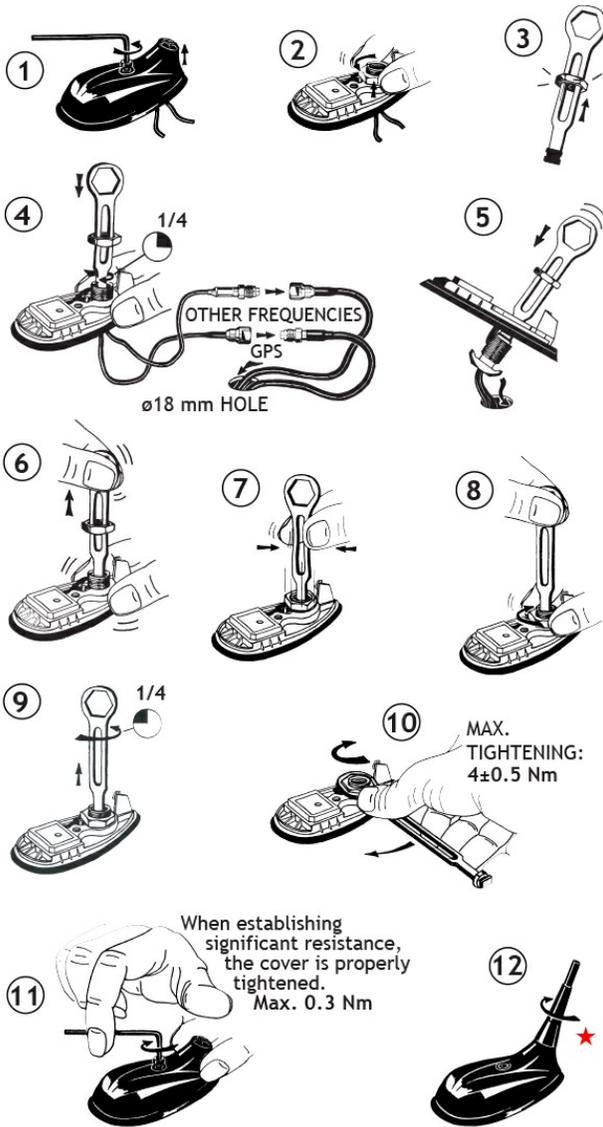
Mechanical	
Materials	Whip : Polyethylene covered copper thread / glass fibre Black-chromed brass Spring : Black-chromed stainless steel
Colour	Black
Height	Approx. 350 mm / 13.78 in.
Weight	Approx. 0.05 kg / 0.11 lb.

GPS Antenna	
P1dB (GPS Amplifier)	Approx. 7 dBm
Coverage (GPS)	Hemispherical
Gain (GPS)	28 dBic in axial direction (typ.)
Connection(s) (GPS)	FME(m) (male for GPS) + FME(f) (female for mobile antenna)
Mounting (GPS)	$\varnothing$ 18.0 mm dia. hole for roof thickness up to 2.0 mm $\varnothing$ 18.5 mm dia. hole for roof thickness 2.0 - 2.5 mm Tools for mounting included
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 °C to +75 °C
Selectivity (GPS)	> 45 dB down @ $\pm$ 45 MHz
Frequency (GPS)	1575 MHz
Weight (GPS)	Approx. 0.114 kg / 0.25 lb.
Power Supply (GPS)	5 $\pm$ 0.5 VDC (3 V resp. 12 V on request)
Current Consumption (GPS Amplifier)	25 mA
Dimensions (GPS)	Approx. 30 x 89 mm/ 0.9 x 2.9 in.
Max. Roof Thickness (GPS)	2.5 mm / 0.10 in.
Colour (GPS)	Black
Polarisation (GPS)	RHCP
Impedance (GPS)	50 $\Omega$
Materials (GPS)	Cu-nite brass, Stainless steel, Reinforced thermoplastic

### ORDERING

Model	Product No.
GPS-C 2/70/FQ/FQ	132000085
Accessories	
DIPX 225/330-FME (optional)	200000670

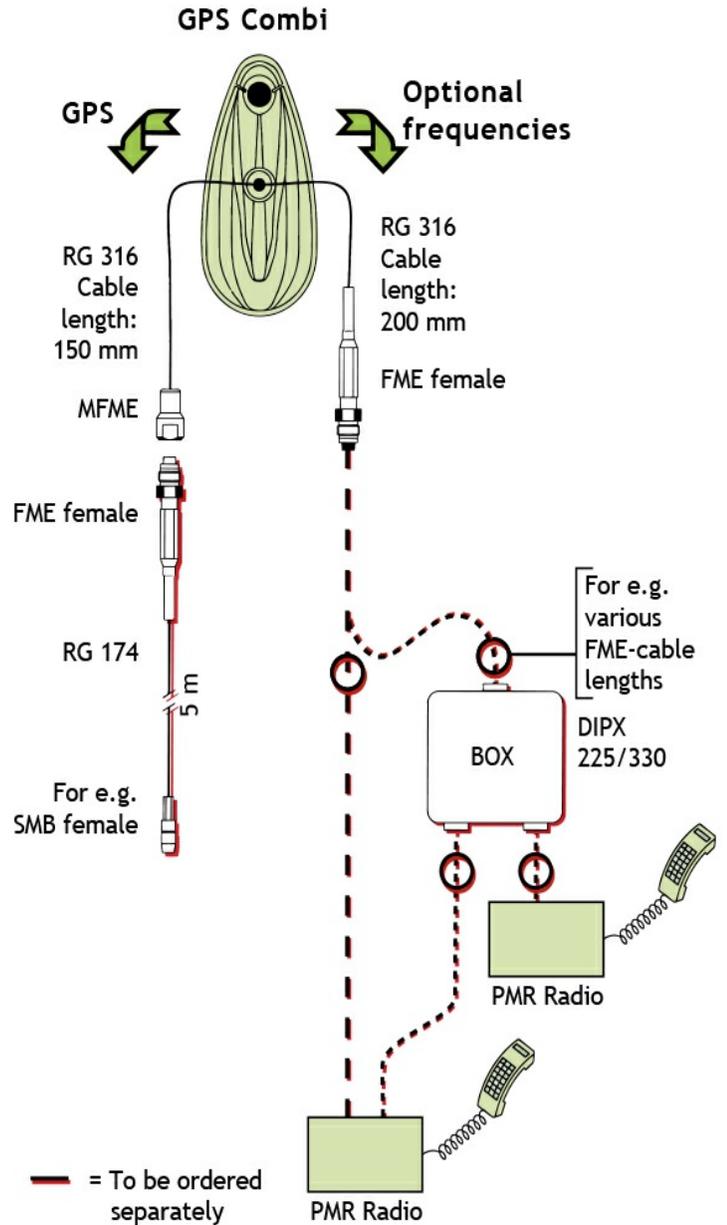
MOUNTING INSTRUCTION



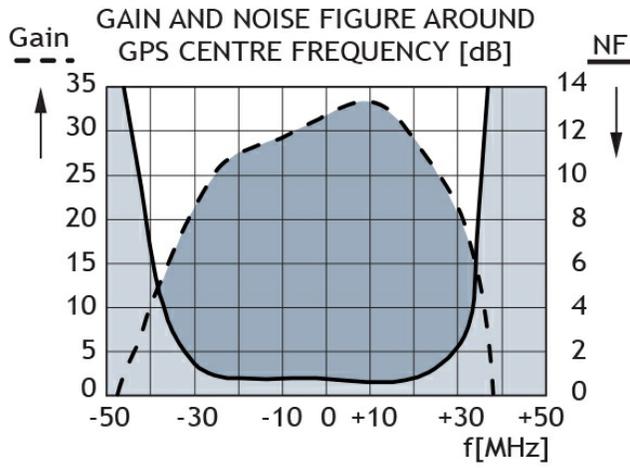
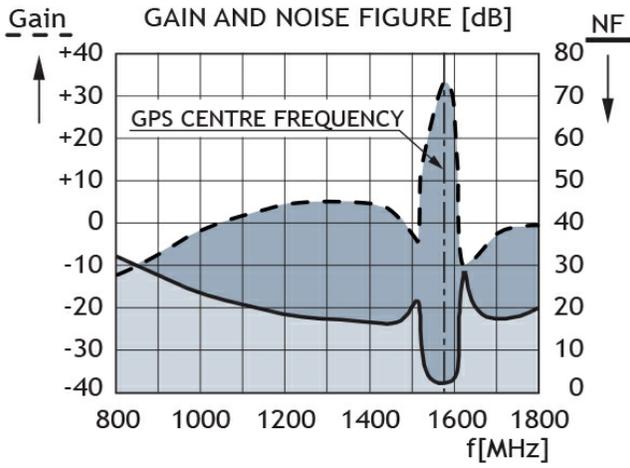
★ The whip should always be dismantled during car wash.

Do not use sealer on rubber gasket or other places.

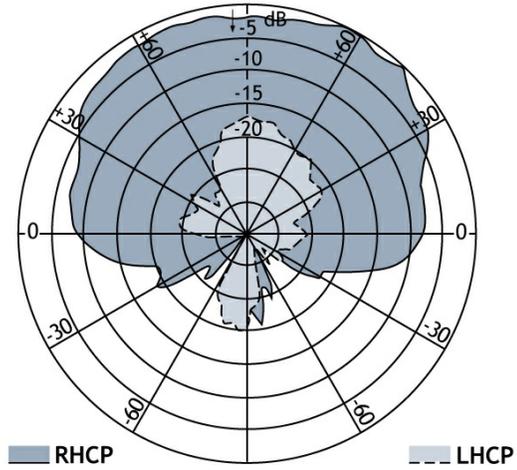
CABLE MOUNTING



TYPICAL RESPONSE CURVES



VERTICAL RADIATION PATTERN



EU AND UK DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type GPS-C 2/70/FQ/FQ is in compliance with EU Directive 2014/53/EU and the UK Radio Equipment Regulations 2017 (S.I. 2017 No. 1206).  
The full text of the Declaration of Conformity is available at:

<https://amphenolprocom.com/images/shop/catalog/pdf-for-catalogues/Declaration-of-Conformity-GPS-C-2.pdf>