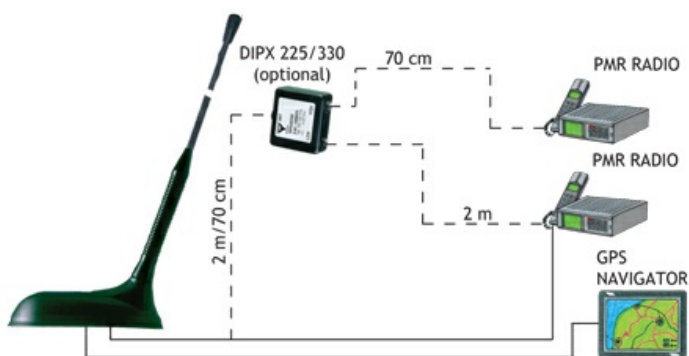


GPS Antenna with Whip with Shock Spring for the 160 MHz and 450 MHz Bands

DESCRIPTION

- > External antenna whip mounted on the GPS-Combi mount.
 - > Sturdy, general-purpose ¼ λ antenna in professional quality.
 - > Easily removable whip for car wash.
- > 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

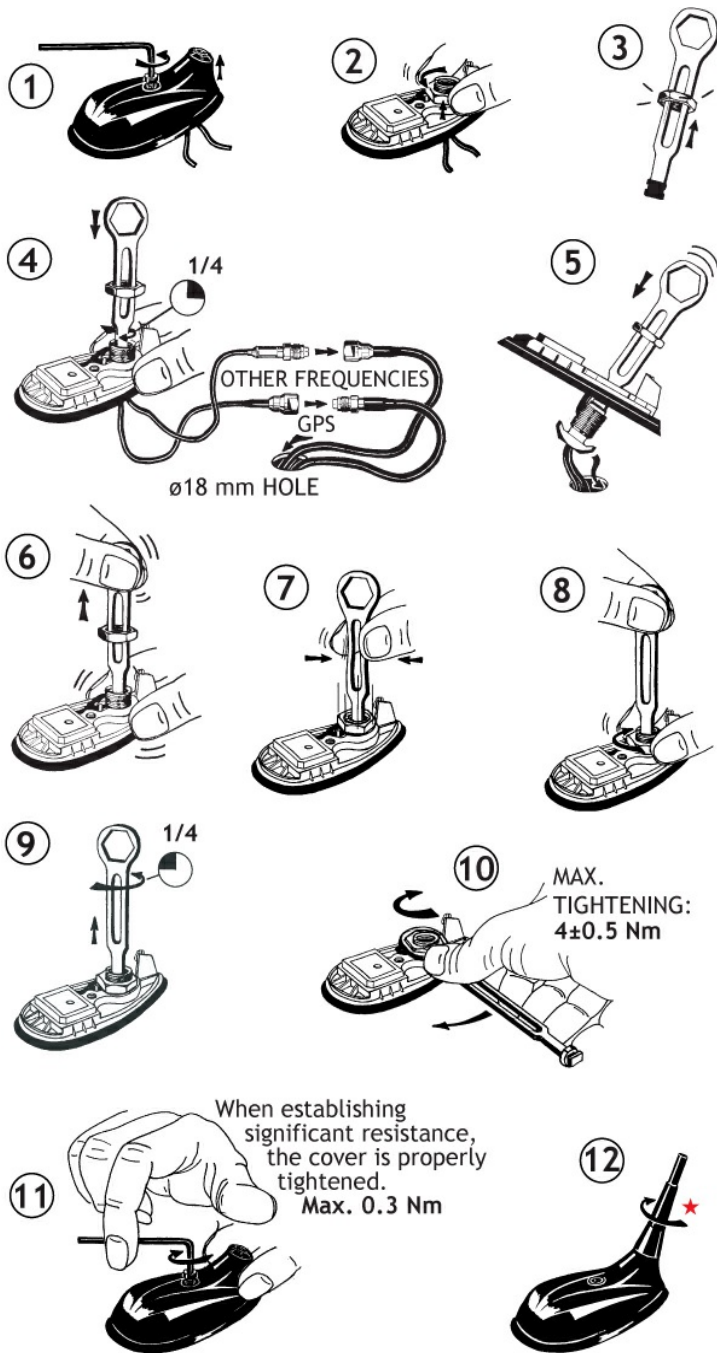
Electrical	
Model	GPS-C 2/70/FQ/FQ
Frequency	160 MHz band: freq. to be stated within: 144...175 MHz 450 MHz band: freq. to be stated within: 380...470 MHz
Antenna Type	Mobile antenna
Max. Input Power	25 W
Polarisation	Vertical
Pattern Type	Hemispherical
Impedance	50 Ω
Bandwidth	160 MHz: 8 MHz @ VSWR ≥ 2.0 450 MHz: 15 MHz @ VSWR ≤ 2.0
Gain (EIA RS-329-1)	0 dB
Mechanical	
Connection(s)	FME (male for GPS) + FME (female for mobile antenna)
Materials	Whip : Polyethylene covered copper thread / glass fibre Black-chromed brass Spring : Black-chromed stainless steel
Colour	Black
Max. Roof Thickness	Max. 2.5 mm / 0.10 in.
Height	Approx. 350 mm / 13.78 in.
Weight	Approx. 0.05 kg / 0.11 lb
Mounting	ø18.0 mm dia. hole for roof thickness up to 2.0 mm ø18.5 mm dia. hole for roof thickness 2.0 - 2.5 mm Tools for mounting included

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° C to +75° C
Selectivity (GPS)	> 45 dB down @ ±45 MHz
Frequency (GPS)	1575 MHz
Weight (GPS)	Approx. 0.114 kg / 0.25 lb.
Power Supply (GPS)	5 ± 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.
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 2/70/FQ/FQ	132000085
Accessories	
DIPX 225/330-FME (optional)	200000670

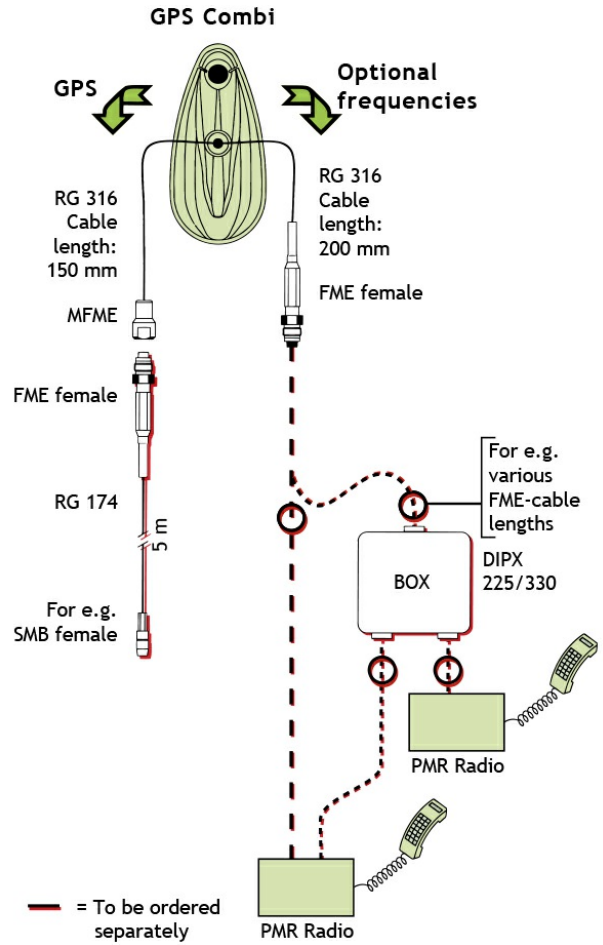
MOUNTING INSTRUCTION



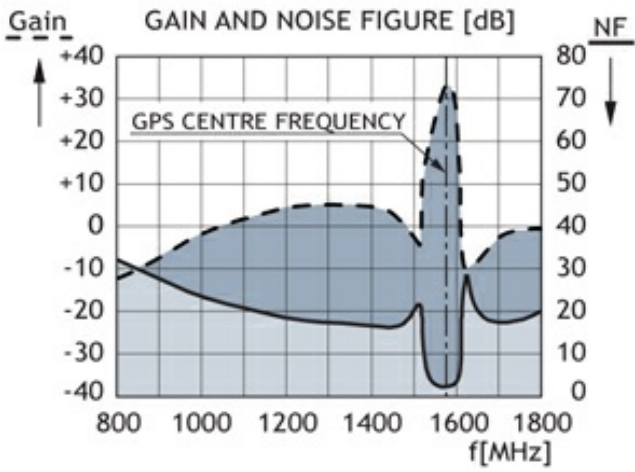
★ The whip should always be dismantled during car wash.

Do not use sealer on rubber gasket or other places.

CABLE MOUNTING



TYPICAL RESPONSE CURVES



VERTICAL RADIATION PATTERN

