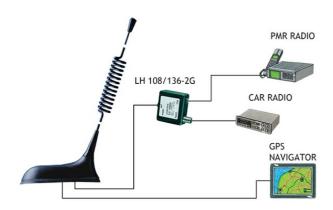


Colinear 4dB Mobile Antenna for the 450 MHz Band

DESCRIPTION

- > External antenna whip mounted on the GPS-Combi mount.
 - > 4 dB mobile antenna with conical stainless steel whip.
 - > Receiving FM-radio when using a Diplexer (LH 108/136-2G).
 - > 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 Circular Polarisation (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 MU 4/FM/
Frequency	Models within 380 - 470 MHz Also receiving FM-radio (88 - 108 MHz)
Antenna Type	Collinear mobile antenna
Max. Input Power	25 W
Polarisation	Vertical
Impedance	50 Ω
VSWR	< 1.3:1 @ f.res. for the 450 MHz band
Bandwidth	> 30 MHz @ VSWR < 2.5
Gain (EIA RS-329-1)	4 dB (acc. to EIA RS-329-1) for the 450 MHz band

Mechanical	
Materials	Black-chromium-plated stainless steel
Colour	Black
Max. Roof Thickness	2.5 mm / 0.10 in.
Height	Approx. 590 mm / 23.23 in.
Weight	Approx. 0.065 kg / 0.14 lb.
Mounting	On the GPS-Combi mount



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)	18.0 mm dia. hole for roof thickness upto 2.0 mm 18.5 mm dia. hole for roof thickness 2.0 - 2.5 mm 19.0 mm dia. hole for roof thickness 3.5 - 7.5 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 @ ± 45 MHz
Installation Torque (GPS)	4 ± 0.5 Nm
Frequency (GPS)	1575 MHz
Weight (GPS)	Approx. 0.114 kg / 0.25 lb.
Power Supply (GPS)	5 ± 0.5 V DC (3 V resp. 12 V on request)
Current Consumption (GPS Amplifier)	0.025 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)	Circular
Impedance (GPS)	50 Ω
Materials (GPS)	Cu-nite brass Stainless steel Reinforced thermoplastic

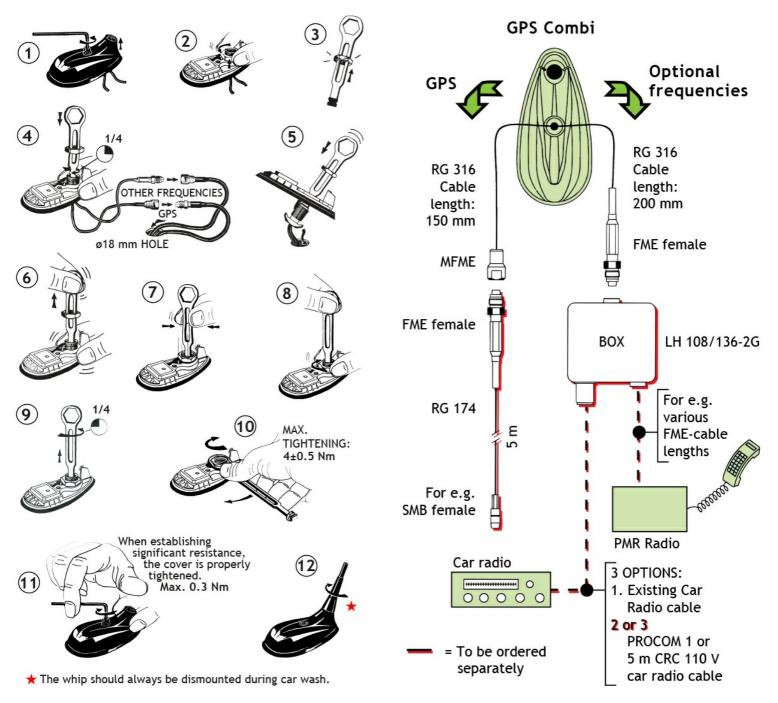
ORDERING

Model	Product No.	Frequency
GPS-C MU 4/FM/s	132000055	380 - 410 MHz
GPS-C MU 4/FM/f	132000052	406 - 430 MHz
GPS-C MU 4/FM/I	132000101	420 - 450 MHz
GPS-C MU 4/FM/h	132000053	440 - 470 MHz



MOUNTING INSTRUCTIONS

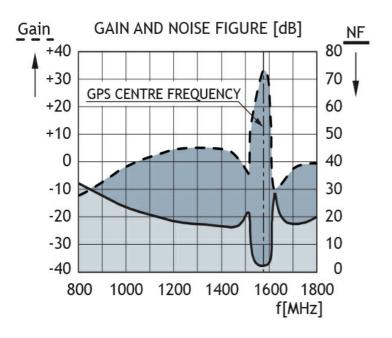
CABLE MOUNTING

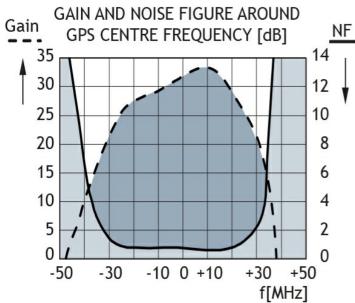


Do not use sealer on rubber gasket or other places.

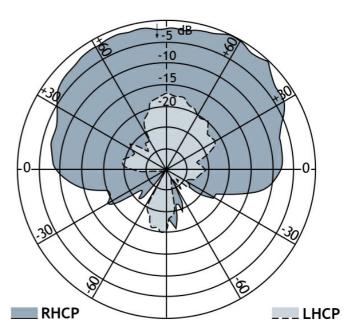


TYPICAL RESPONSE CURVES





VERTICAL RADIATION PATTERN



EU AND UK DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type GPS-C MU 4/FM/...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:

 $\label{lem:https://amphenolprocom.com/images/shop/catalog/pdf-for-catalouges/Declaration-of-Conformity-GPS-C-2.pdf$