

## colinear 4dB Mobile Antenna for the 450 MHz Band

### DESCRIPTION

- External antenna whip mounted on the GPS-Combi mount.
- GPS-antenna for fixed installations.
- 4 dB mobile antenna with conical stainless steel whip.
- Receiving FM-radio when using a Diplexer (LH 108/136-2G).
- Easily removable whip for car wash.
- 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.



### ORDERING

Type	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/l	132000101	420 - 450 MHz
GPS-C MU 4/FM/h	132000053	440 - 470 MHz

### SPECIFICATIONS

Electrical		
Model	GPS-C MU 4/FM/...	GPS-COMBI MOUNT
Frequency	Models within 380-470 MHz Also receiving FM-radio (88 - 108 MHz)	
Antenna Type	Collinear mobile antenna	Active patch antenna
Max. Input Power	25 W	
Polarisation	Vertical	Circular
Pattern Type	Hemispherical	
Impedance	50 Ω	50 Ω
VSWR	< 1.3:1 @ f.res. for the 450 MHz band	
Bandwidth	> 30 MHz @ SWR < 2.5	
Gain (EIA RS-329-1)	4 dB (acc. to EIA RS-329-1) for the 450 MHz band	
Cross Polar Attenuation	> 10 dB (typ.)	
Selectivity	> 45 dB down at +/- 45 MHz	

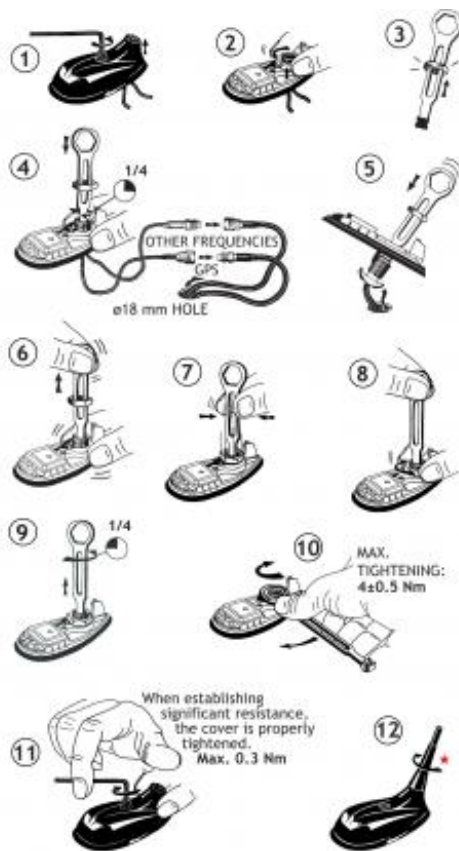
Mechanical	
Connection(s)	FME (male for GPS) + FME (female for mobile antenna)
Materials	Black-chromium-plated stainless steel
Colour	Black
Max. Roof Thickness	2.5 mm / 0.10 in.
Height	590 mm / 23.23 in.
Weight	0.065 kg / 0.14 lb
Mounting	On the GPS-Combi mount

GPS Antenna	
P1dB (GPS Amplifier)	Approx. +7 dBm
Gain (GPS)	28 dBic in axial direction (typ.)
Noise Figure (GPS Amplifier)	< 1 dB (typ.)
Gain (GPS Amplifier)	> 30 dB (typ.)
VSWR (GPS Amplifier)	< 2.0:1
Operating Temperature Range (GPS)	-35 to 75 °C
Installation Torque (GPS)	4 ± 0.5 Nm
Frequency (GPS)	1575 MHz
Weight (GPS)	0.114 kg / 0.25 lb
Power Supply (GPS)	5 ± 0.5 VDC (3 V resp. 12 V on request)
Current Consumption (GPS Amplifier)	0.025 mA
Dimensions (GPS)	Approx. 30 x 89 mm
Colour (GPS)	Black
Materials (GPS)	Cu-nite brass, Stainless steel, Reinforced thermoplastic

ADDITIONAL DATA



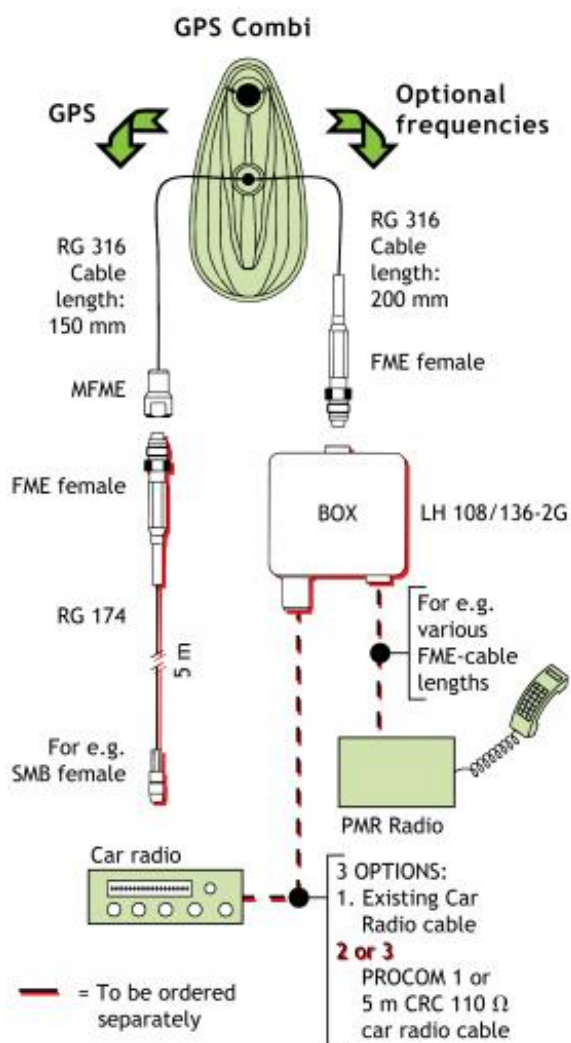
MOUNTING INSTRUCTIONS



★ The whip should always be dismounted during car wash.

Do not use sealer on rubber gasket or other places.

CABLE MOUNTING



TYPICAL RESPONSE CURVES

VERTICAL RADIATION PATTERN

