

Unity Gain ¼ λ Mobile Antenna for the TETRA and EGSM Band

DESCRIPTION

- External antenna whip mounted on the GPS-Combi mount.
- GPS-antenna for fixed installations.
- Flexible antenna made of steel wire covered with black silicone tubing.
- Easily removable 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.

SPECIFICATIONS

Electrical		
Model	GPS-C FLEX/TETRA/GSM	GPS-COMBI MOUNT
Frequency	380 - 430 MHz (TETRA) 880 - 960 MHz (EGSM)	1575 MHz
Antenna Type	Mobile antenna	Active patch antenna
Max. Input Power	25 W	-
Polarisation	Vertical	Circular right-hand
Pattern Type	Hemispherical	Hemispherical
Impedance	50 Ω	50 Ω
Gain	0 dB (acc. to EIA RS-329-1) for the TETRA band	28 dBic in axial direction (typ.)
VSWR	≤ 1.7 @ f.res.	-
Bandwidth	≥ 50 MHz @ VSWR ≤ 2.5	-
Cross Polar Attenuation	-	> 10 dB (typ.)
Selectivity	-	> 45 dB down @ ± 45 MHz

Mechanical		
Connection(s)		FME(m) (for GPS) + FME(f) (for mobile antenna)
Materials	Silicone tube over flexible bowden wire Chromed brass	Cu-nite brass>br/>Stainless steel Reinforced thermoplastic
Installation Torque	0 Nm	4 ± 0.5 Nm
Colour	Black	Black
Dimensions		Approx. 30 x 89 mm
Max. Roof Thickness	-	Max. 2.5 mm or 3.5 - 7.5 mm / 0.10 in. or 0.14 - 0.30 in.
Height	Approx. 140 mm / 5.51 in.	-
Weight	Approx. 0.025 kg / 0.06 lb.	Approx. 0.114 kg / 0.25 lb.
Mounting	On the GPS-Combi mount	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 ø19.0 mm dia. hole for roof thickness 3.5 - 7.5 mm Tools for mounting included



CONNECTION DIAGRAM

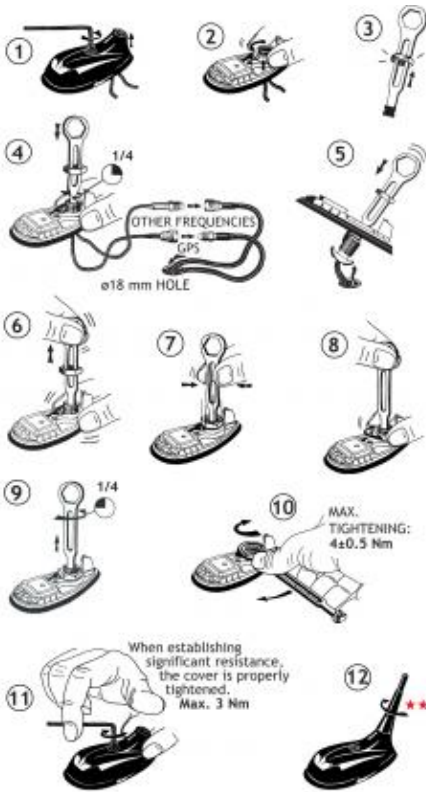


GPS Antenna	
P1dB (GPS Amplifier)	Approx. +7 dBm
Noise Figure (GPS Amplifier)	< 1 dB (typ.)
Gain (GPS Amplifier)	> 30 dB (typ.)
VSWR (GPS Amplifier)	< 2.0:1
Operating Temperature Range (GPS)	-35 to 75 °C
Selectivity (GPS)	> 45 dB down @ ± 45 MHz
Power Supply (Amplifier)	5 ± 0.5 VDC (3 V resp. 12 V on request)
Current Consumption (GPS Amplifier)	0.025 mA

ORDERING

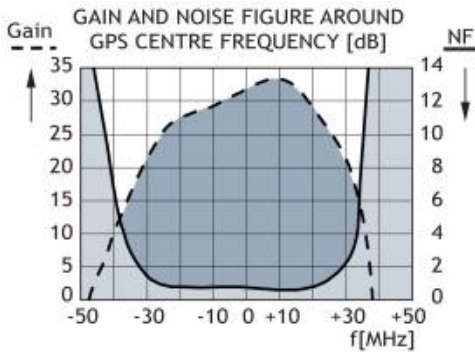
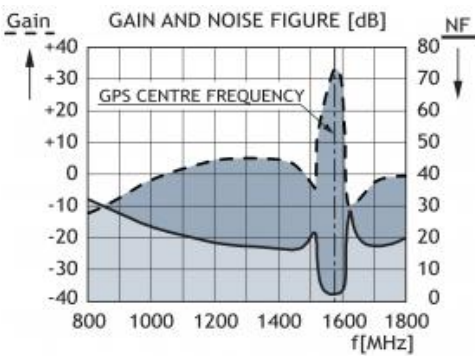
Model	Product No.	Description
GPS-C FLEX/TETRA/GSM	132000066	MAX.ROOF THICKNESS 2.5 mm
GPS-C FLEX/TETRA/GSM/7mm	132000169	ROOF THICKNESS: 3.5 - 7.5 mm

MOUNTING INSTRUCTION

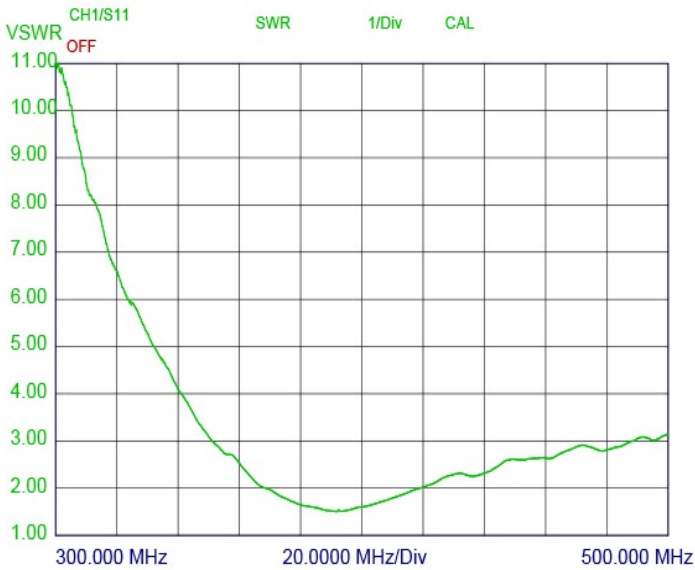


★★ The whip should always be dismounted during car wash.

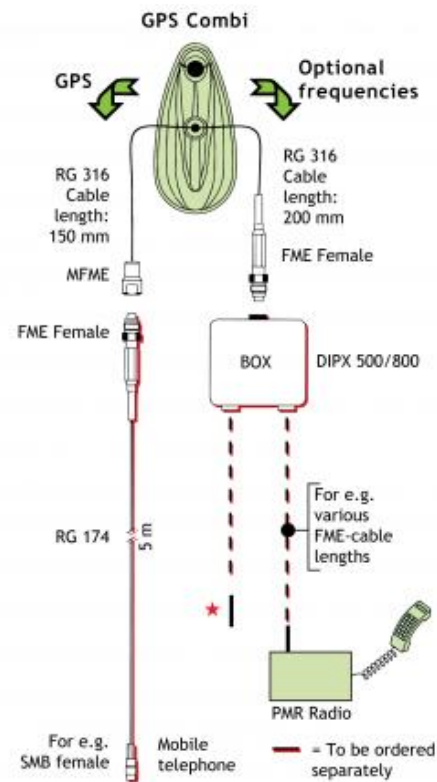
TYPICAL RESPONSE CURVES



TYPICAL VSWR CURVE



CABLE MOUNTING



★ FME-Connector suitable for Mobile telephone in question.

VERTICAL RADIATION PATTERN

