

GPS-C FLEX/70/GSM/...

Unity Gain $\frac{1}{4}$ λ Mobile Antenna for the 450 MHz Band

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



DESCRIPTION

- 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.

ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY	ROOF THICKNESS
GPS-C FLEX/70/GSM/s	132000068	380 - 420 MHz	Max. 2.5 mm
GPS-C FLEX/70/GSM/l	132000069	410 - 450 MHz	Max. 2.5 mm
GPS-C FLEX/70/GSM/h	132000070	430 - 470 MHz	Max. 2.5 mm

SPECIFICATIONS FOR WHIP

ELECTRICAL	
MODEL	GPS-C FLEX/70/GSM/...
ANTENNA TYPE	$\frac{1}{4}$ λ mobile antenna
FREQUENCY	
GPS-C FLEX/70/GSM/s:	380 – 420 MHz
GPS-C FLEX/70/GSM/l:	410 – 450 MHz
GPS-C FLEX/70/GSM/h:	430 – 470 MHz
Also useable for the GSM Band	(790 – 960 MHz)
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	0 dB (acc. to EIA RS-329-1) for the 70 cm band
BANDWIDTH	≥ 50 MHz @ SWR ≤ 2.5
SWR	≤ 1.7 @ f.res. for the 70 cm band
MAX. POWER	25 W

MECHANICAL	
MATERIALS	Silicone tube over flexible bowden wire Chromed brass
COLOUR	Black
HEIGHT	Approx. 140 mm
WEIGHT	Approx. 25 g
MOUNTING	On the GPS-Combi mount

SPECIFICATIONS FOR GPS-COMBI MOUNT

ELECTRICAL General specifications	
MODEL	GPS-COMBI MOUNT
ANTENNA TYPE	Active patch antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Circular right-hand
COVERAGE	Hemispherical
GAIN	28 dBic in axial direction (typ.)
CROSS-POLARIZATION ATT.	> 10 dB (typ.)
SELECTIVITY	> 45 dB down @ ± 45 MHz

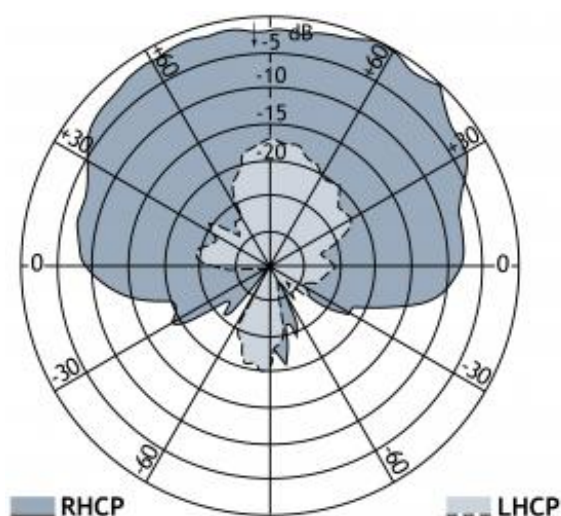
BUILT-IN AMPLIFIER	
GAIN	> 30 dB (typ.)
NOISE FIGURE	< 1 dB (typ.)
P _{1dB}	Approx. +7 dBm
SWR (output)	≤ 2.0
SUPPLY VOLTAGE	5 $\pm$ 0.5 VDC (3 V resp. 12 V on request)
CURRENT CONSUMPTION	Approx. 25 mA

MECHANICAL (only for the GPS-part)

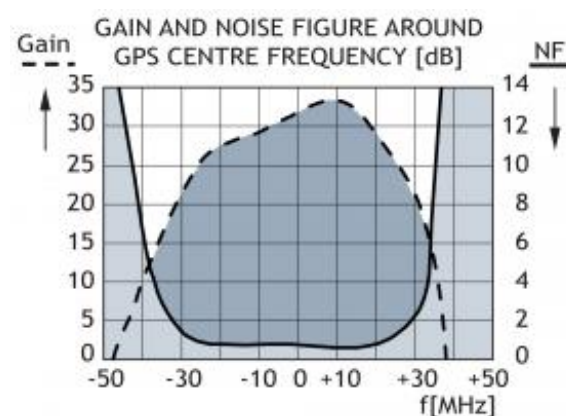
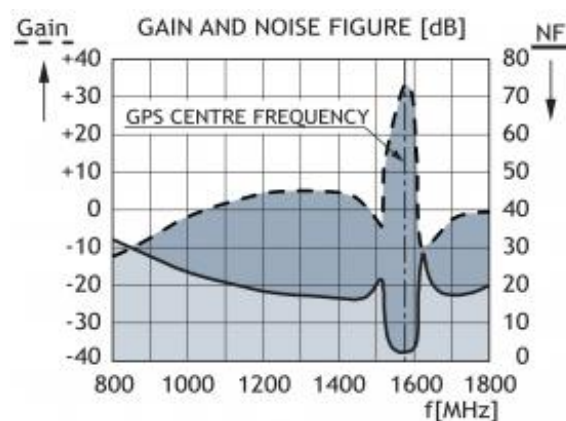
MATERIALS	Cu-nite brass Stainless steel Reinforced thermoplastic
ANTENNA COLOUR	Black
TEMP. RANGE	-35° C → +75° C
CONNECTOR	FME (male for GPS) + FME (female for mobile antenna)
RECOMMENDED INSTALL. TORQUE	4 ± 0.5 Nm
DIMENSIONS(H x L)	Approx. 30 x 89 mm
ROOF THICKNESS	Max. 2.5 mm
WEIGHT	Approx. 114 g
MOUNTING	ø18.0 mm dia. hole for roof thickness up till 2.0 mm. ø18.5 mm dia. hole for roof thickness 2.0 - 2.5 mm. Tools for mounting included.



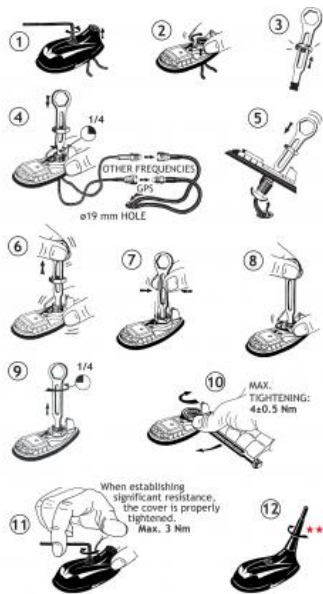
VERTICAL RADIATION PATTERN



TYPICAL RESPONSE CURVES

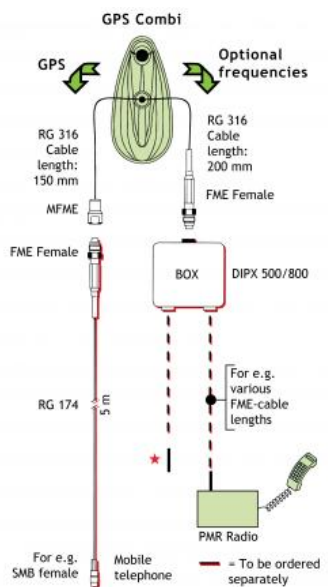


MOUNTING INSTRUCTIONS



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

CABLE MOUNTING



★ FME-Connector suitable for Mobile telephone in question.