

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

Unity Gain $1/4 \lambda$ Mobile Antenna for the 450 MHz Band

DESCRIPTION

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



ORDERING DESIGNATIONS

TYPE NO.	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

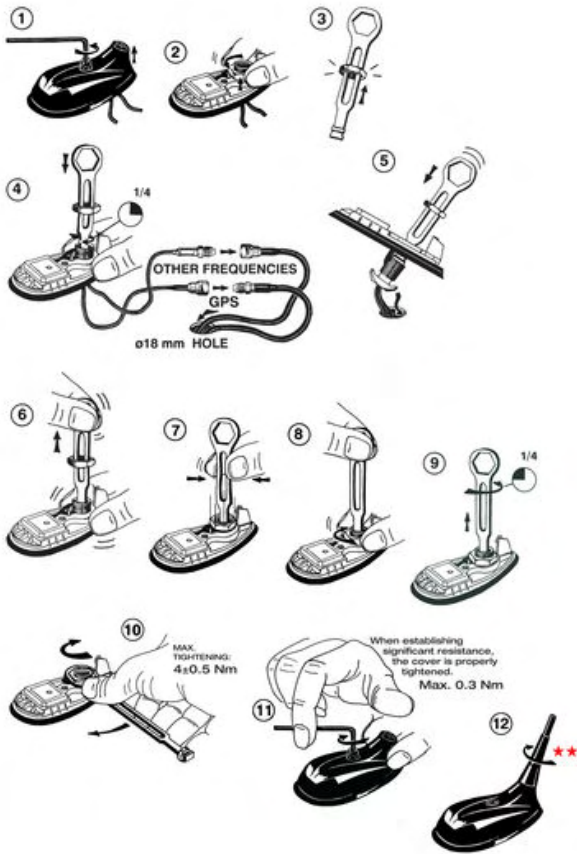
SPECIFICATIONS FOR WHIP

ELECTRICAL	
MODEL	GPS-C FLEX/70/GSM/...
ANTENNA TYPE	$1/4 \lambda$ 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 (890 – 960 MHz)
IMPEDANCE	Nom. 50 Ω
POLARISATION	Vertical
GAIN	0 dB (acc. to EIA RS-329-1) for the 70 cm band
BANDWIDTH	≥ 40 MHz @ SWR ≤ 1.6
SWR	≤ 1.5 @ 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

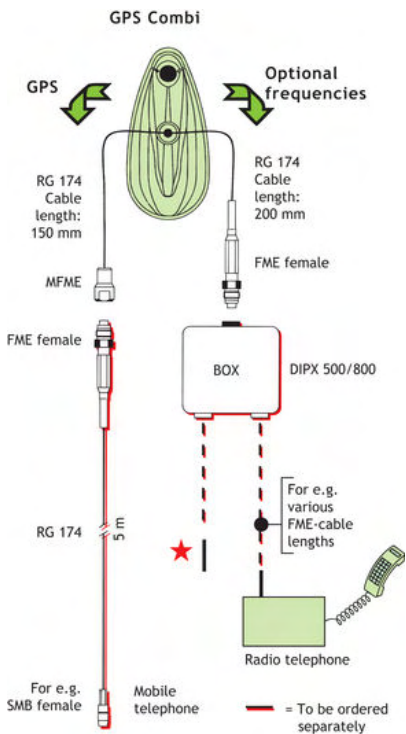
ELECTRICAL General specifications	
MODEL	GPS-COMBI MOUNT
ANTENNA TYPE	Active patch antenna
FREQUENCY	1575 MHz
IMPEDANCE	Nom. 50 Ω
POLARISATION	Circular right-hand
COVERAGE	Hemispherical
GAIN	28 dBic in axial direction (typ.)
CROSS-POLARISATION ATT.	> 10 dB (typ.)
BUILT-IN AMPLIFIER	
GAIN	> 30 dB (typ.)
NOISE FIGURE	< 1 dB (typ.)
P 1dB	Approx. +7 dBm
SELECTIVITY	> 45 dB down at ± 45 MHz
SWR (output)	≤ 2.0
SUPPLY VOLTAGE	5 ± 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 \rightarrow $+75^{\circ}$ 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. 2.0 mm
WEIGHT	Approx. 114 g
MOUNTING	$\varnothing 18$ mm dia. hole (For roof thickness 2.5 mm mounting hole should be $\varnothing 18.5$ mm dia.) Tools for mounting included

MOUNTING INSTRUCTIONS



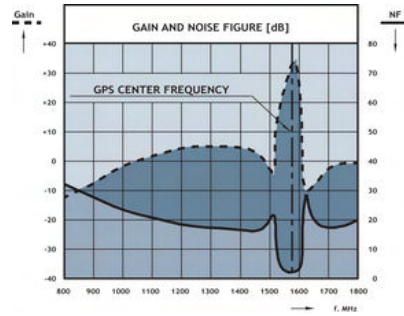
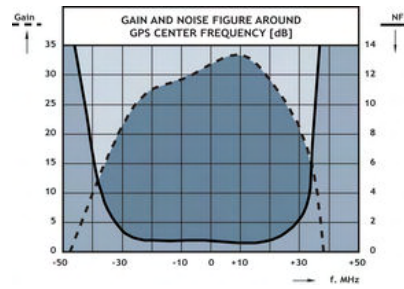
Do not use sealer on rubbergasket or other places.

CABLE MOUNTING

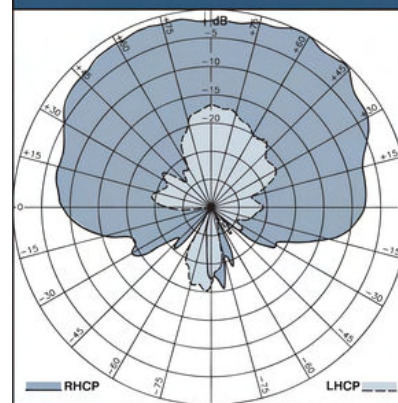


★ FME-Connector suitable for Mobile telephone in question. ★★ The whip should always be dismantled during car wash.

TYPICAL RESPONSE CURVE



VERTICAL RADIATION PATTERN



PROCOM A/S reserve the right to amend specifications without prior notice.

06/05/2009