

# GPS-C MU 1/...

## GPS Antenna with a $\frac{1}{4} \lambda$ Whip for the 400 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 Polarization (RHCP).
- 5 V supply voltage (3 V respectively 12 V available on request).
- DC supply via RF-connector.
- Black-chromed, conical stainless steel whip.
- Sturdy, general-purpose  $\frac{1}{4} \lambda$  antenna of professional quality.



### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
GPS-C MU 1/...	132000145

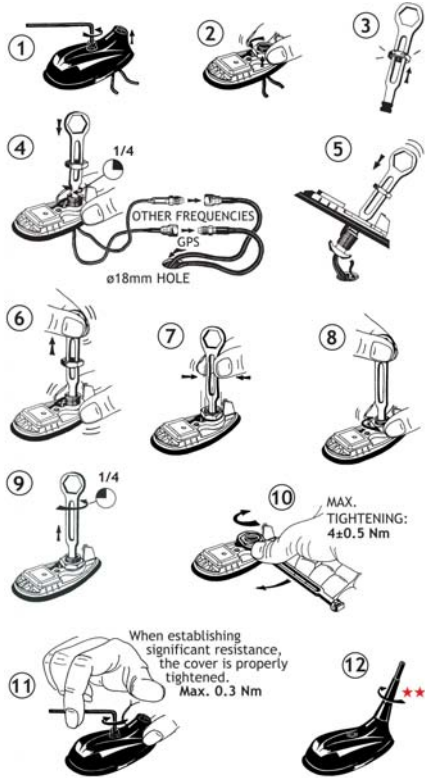
### SPECIFICATIONS FOR WHIP ELECTRICAL

ELECTRICAL	
MODEL	GPS-C MU 1/...
ANTENNA TYPE	$\frac{1}{4} \lambda$ mobile antenna
FREQUENCY	370 - 470 MHz
IMPEDANCE	Nom. 50 $\Omega$
POLARIZATION	Vertical
GAIN	Approx. 0 dB (acc. to EIA RS-329-1)
BANDWIDTH	$\geq 60$ MHz @ SWR $\leq 2.0$
SWR	$\leq 1.3$ @ f.res.
MAX. POWER	25 W
MECHANICAL	
MATERIALS	<b>Whip:</b> Black-chromed, conical stainless steel Black-chromed brass <b>Spring:</b> Black-chromed, stainless steel
COLOUR	Black
HEIGHT	Approx. 160 mm
WEIGHT	Approx. 50 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 $\Omega$
POLARIZATION	Circular right-hand
COVERAGE	Hemispherical
GAIN	28 dBic in axial direction (typ.)
CROSS-POLARIZATION ATT.	> 10 dB (typ.)
SELECTIVITY	> 45 dB down @ $\pm 45$ MHz
BUILT-IN AMPLIFIER	
GAIN	> 30 dB (typ.)
NOISE FIGURE	< 1 dB (typ.)
P 1dB	Approx. +7 dBm
SWR (output)	$\leq 2.0$
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 $\rightarrow$ +75° C
CONNECTOR	FME (male for GPS) + FME (female for mobile antenna)
RECOMMENDED INSTALL. TORQUE	4 $\pm$ 0.5 Nm
DIMENSIONS (H x L)	Approx. 30 x 89 mm
ROOF THICKNESS	Max. 2.5 mm
WEIGHT	114 g
MOUNTING	$\varnothing 18.0$ mm dia. hole for roof thickness up to 2.0 mm $\varnothing 18.5$ mm dia. hole for roof thickness 2.0 - 2.5 mm Tools for mounting included

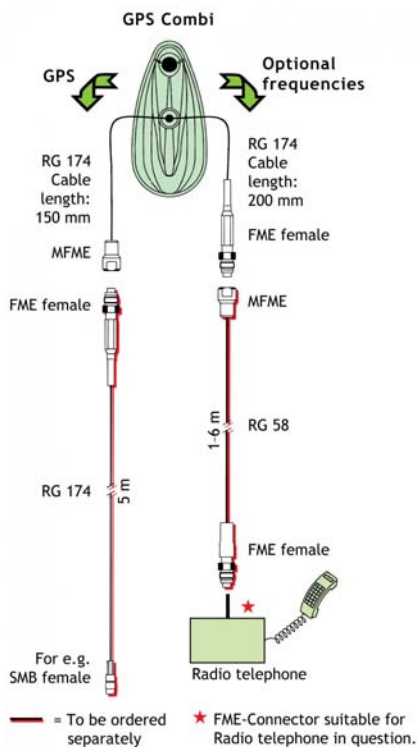
## MOUNTING INSTRUCTIONS



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

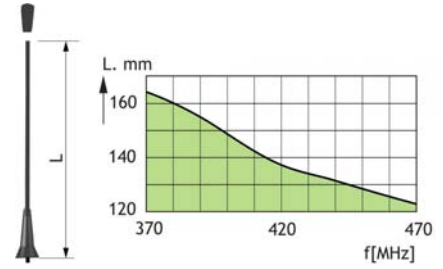
Do not use sealer on rubber gasket or other places.

## CABLE MOUNTING

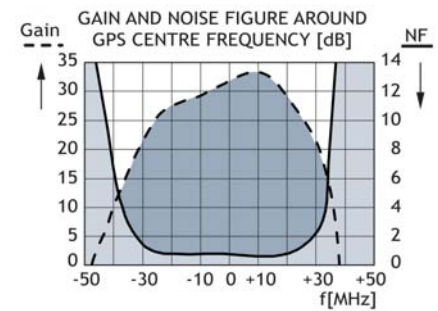
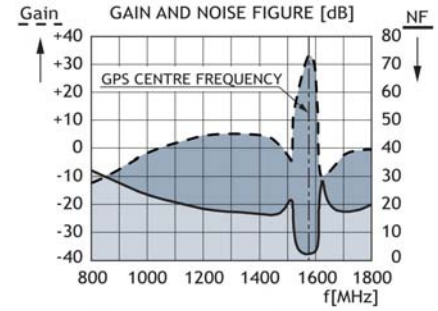


## TUNING

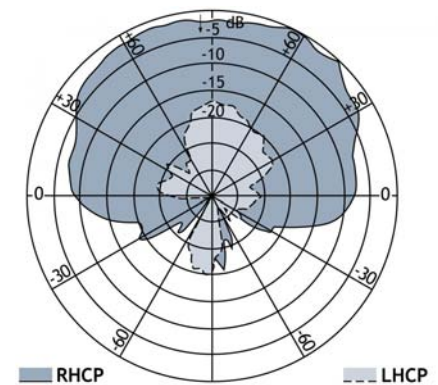
The antenna should always be tuned using an SWR-meter. The cutting diagram below serves as a guide for this procedure.



## TYPICAL RESPONSE CURVE



## VERTICAL RADIATION PATTERN



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