

## GPS Antenna with Whip with Shock Spring for the 160 MHz, 450 MHz and FM Bands

### DESCRIPTION

- > External antenna whip mounted on the GPS-Combi mount.
  - > Black-chromed, conical stainless steel whip.
  - > Sturdy, general-purpose ¼ λ antenna in professional quality.
  - > Easily removable whip for cleaning in car-washing machine.
- > 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.



### CONNECTION DIAGRAM



### SPECIFICATIONS

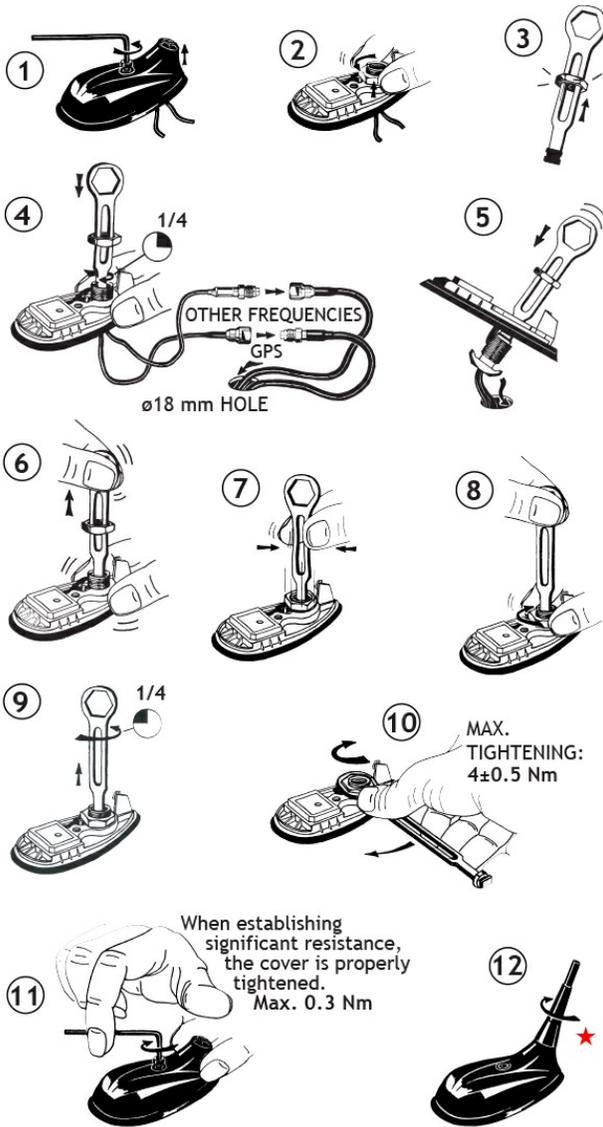
| Electrical       |   |
|------------------|---|
| Model            | GPS-C 2R/70/FM  |
| Frequency        | 2 m: 145 MHz<br>70 cm: 435 MHz<br>FM band: 88-108 MHz   |
| Antenna Type     | Mobile antenna  |
| Max. Input Power | 25 W  |
| Polarisation     | Vertical  |
| Impedance        | 50 Ω  |
| VSWR             | < 1.3:1 @ f. res.   |
| Bandwidth        | 2 m: 20 MHz<br>70 cm: 40 MHz @ VSWR ≤ 2.0   |
| Mechanical       |   |
| Materials        | Whip: Black-chromed, conical stainless steel<br>Black-chromed brass<br>Mount: Weather- and shockproof plastics<br>Black-chromed brass |
| Colour           | Black   |
| Height           | 492 mm / 19.37 in.  |
| Weight           | 0.05 kg / 0.11 lb.  |
| Mounting         | On the GPS-Combi mount  |

| GPS Antenna                         |   |
|-------------------------------------|---|
| P1dB (GPS Amplifier)                | Approx. 7 dBm   |
| Coverage (GPS)                      | Hemispherical   |
| Gain (GPS)                          | 28 dBc in axial direction (typ.)  |
| Connection(s) (GPS)                 | FME(m) (male for GPS) + FME(f) (female for mobile antenna)  |
| Mounting (GPS)                      | ø18.0 mm dia. hole for roof thickness up to 2.0 mm<br>ø18.5 mm dia. hole for roof thickness 2.0 - 2.5 mm<br>Tools for mounting included |
| Antenna Type (GPS)                  | Active patch antenna  |
| Noise Figure (GPS Amplifier)        | < 1 dB (typ.)   |
| Cross Polar Discrimination (GPS)    | > 10 dB (typ.)  |
| Gain (GPS Amplifier)                | > 30 dB (typ.)  |
| VSWR (GPS Amplifier)                | < 2.0:1   |
| Selectivity (GPS)                   | > 45 dB down @ ± 45 MHz   |
| Frequency (GPS)                     | 1575 MHz  |
| Weight (GPS)                        | Approx. 0.114 kg / 0.25 lb.   |
| Power Supply (GPS)                  | 5 ± 0.5 V DC (3 V resp. 12 V on request)  |
| Current Consumption (GPS Amplifier) | 0.025 mA  |
| Dimensions (GPS)                    | Approx. 30 x 89 mm / 0.9 x 2.9 in.  |
| Max. Roof Thickness (GPS)           | 2.5 mm / 0.10 in.   |
| Colour (GPS)                        | Black   |
| Polarisation (GPS)                  | RHCP  |
| Impedance (GPS)                     | 50 Ω  |
| Materials (GPS)                     | Cu-nite brass, Stainless steel, Reinforced thermoplastic  |

### ORDERING

| Model                       | Product No. |
|-----------------------------|-------------|
| GPS-C 2R/70/FM              | 132000061   |
| Accessories                 |             |
| LH 108/136-2G (optional)    | 200000762   |
| DIPX 225/330-FME (optional) | 200000670   |

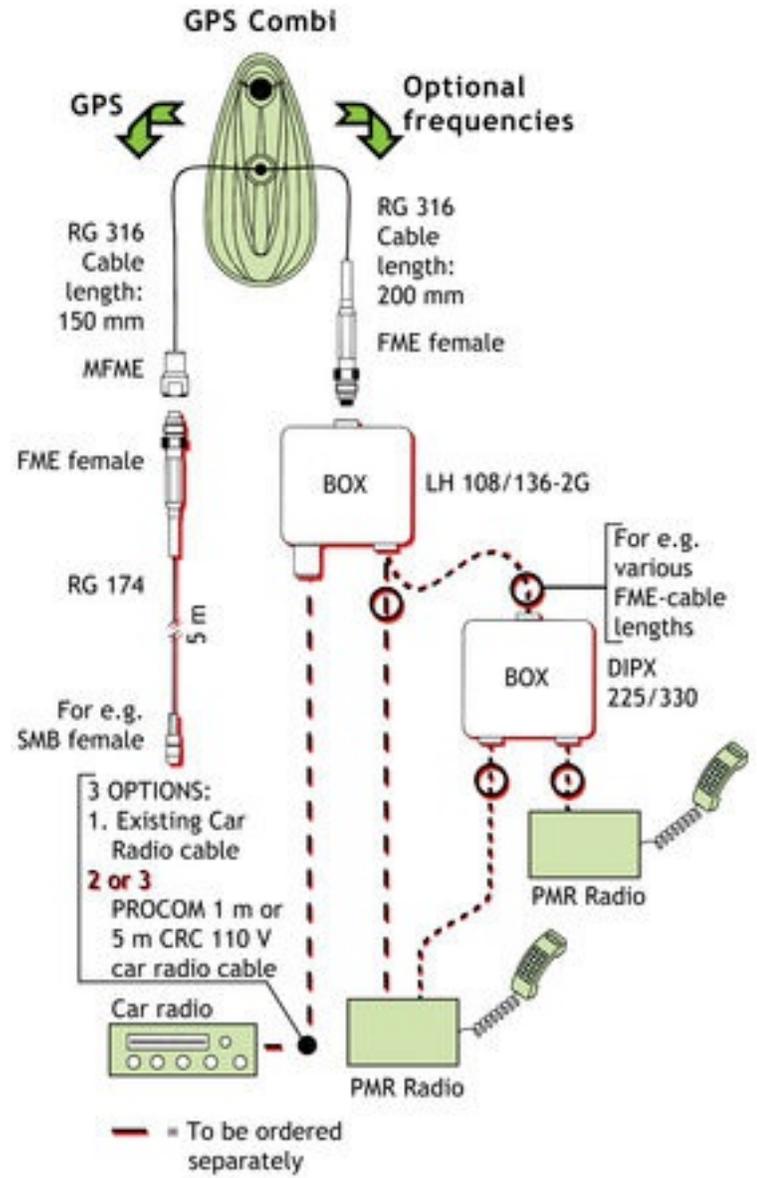
MOUNTING INSTRUCTIONS



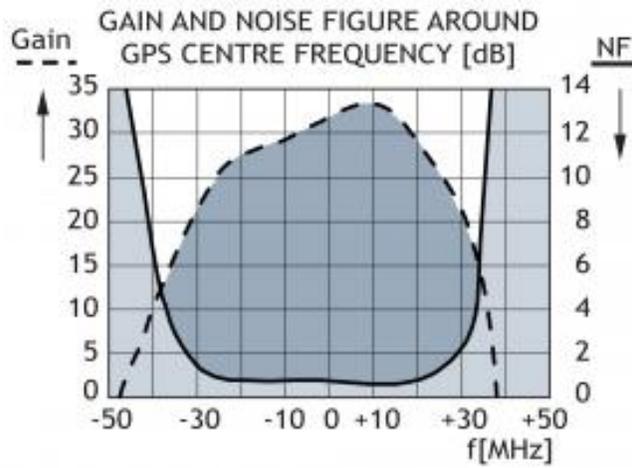
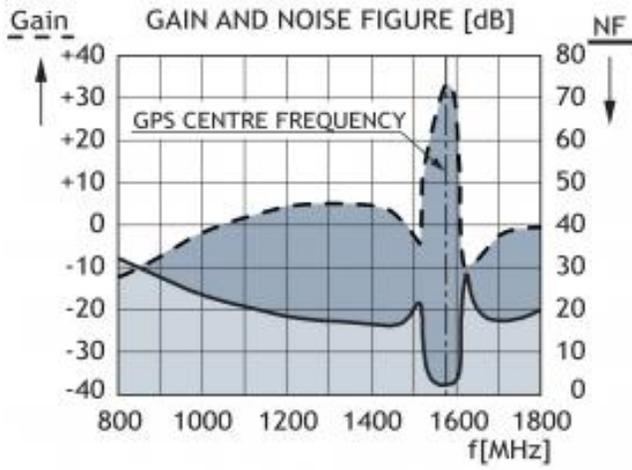
★ The whip should always be dismantled during car wash.

Do not use sealer on rubber gasket or other places.

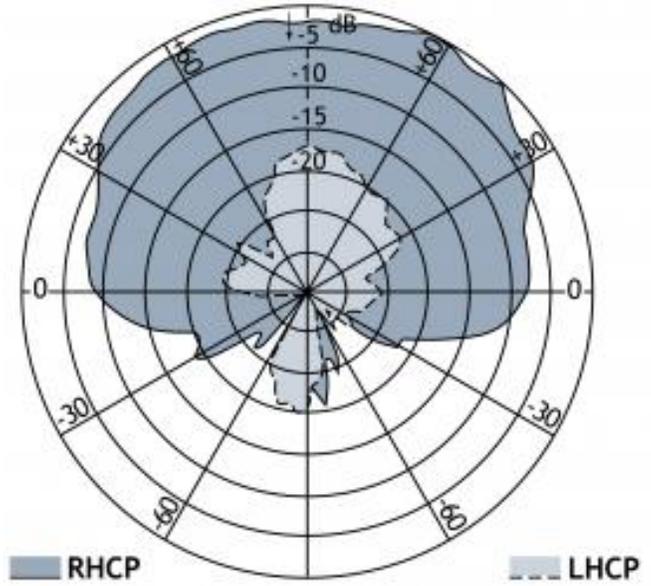
CABLE MOUNTING



TYPICAL RESPONSE CURVES



VERTICAL RADIATION PATTERN



EU AND UK DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type GPS-C 2R/70/FM is in compliance with EU Directive 2014/53/EU and the UK Radio Equipment Regulations 2017 (S.I. 2017 No. 1206). The full text of the Declaration of Conformity is available at:

<https://amphenolprocom.com/images/shop/catalog/pdf-for-catalogues/Declaration-of-Conformity-GPS-C-1.pdf>