

Unity Gain ¼ λ Mobile Antenna for the 450 MHz Band

DESCRIPTION

- 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.
- 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

| Model               | Product No. | Description               | Frequency     |
|---------------------|-------------|---------------------------|---------------|
| GPS-C FLEX/70/GSM/s | 132000068   | MAX.ROOF THICKNESS 2.5 mm | 380 - 420 MHz |
| GPS-C FLEX/70/GSM/l | 132000069   | MAX.ROOF THICKNESS 2.5 mm | 410 - 450 MHz |
| GPS-C FLEX/70/GSM/h | 132000070   | MAX.ROOF THICKNESS 2.5 mm | 430 - 470 MHz |

SPECIFICATIONS

| Electrical              |                           |                      |
|-------------------------|---------------------------|----------------------|
| Model                   | GPS-C FLEX/70/GSM/...     | GPS-COMBI MOUNT      |
| Antenna Type            | Mobile antenna            | Active patch antenna |
| Max. Input Power        | 25 W                      |                      |
| Polarisation            | Vertical                  | Circular             |
| Pattern Type            | Hemispherical             |                      |
| Impedance               | 50 Ω                      | 50 Ω                 |
| Gain (EIA RS-329-1)     | 0 dB                      |                      |
| Cross Polar Attenuation | > 10 dB (typ.)            |                      |
| Selectivity             | > 45 dB down @ +/- 45 MHz |                      |

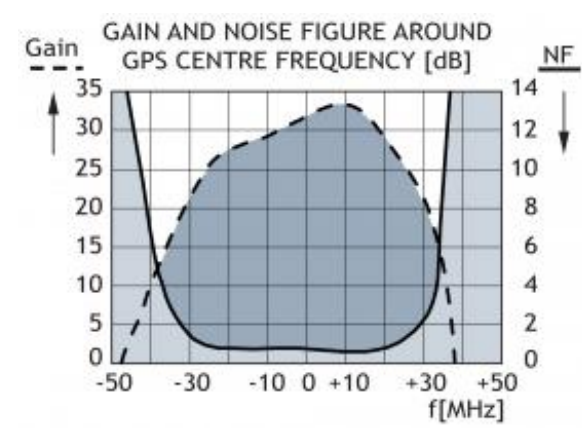
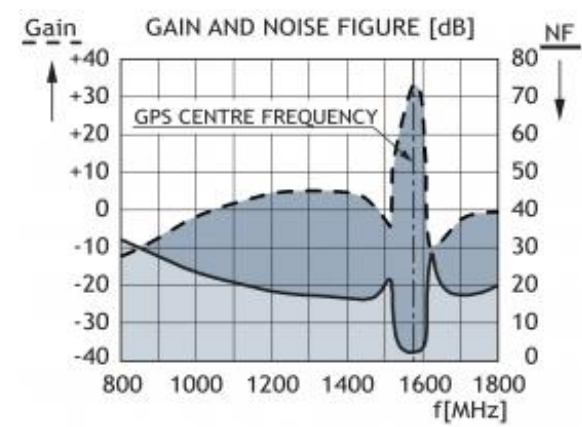
| Mechanical          |                                                          |
|---------------------|----------------------------------------------------------|
| Connection(s)       | FME (male for GPS) + FME (female for mobile antenna)     |
| Materials           | Silicone tube over flexible bowden wire<br>Chromed brass |
| Colour              | Black                                                    |
| Max. Roof Thickness | 2.5 mm / 0.10 in.                                        |
| Height              | 140 mm / 5.51 in.                                        |
| Weight              | 0.025 kg / 0.06 lb                                       |
| Mounting            | On the GPS-Combi mount                                   |

| GPS Antenna                         |                                                          |
|-------------------------------------|----------------------------------------------------------|
| P1dB (GPS Amplifier)                | Approx. +7 dBm                                           |
| Gain (GPS)                          | 28 dBic in axial direction (typ.)                        |
| 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                                             |
| Installation Torque (GPS)           | 4 ± 0.5 Nm                                               |
| Frequency (GPS)                     | 1575 MHz                                                 |
| Weight (GPS)                        | 0.114 kg / 0.25 lb                                       |
| Power Supply (GPS)                  | 5 ± 0.5 VDC (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.                        |
| Colour (GPS)                        | Black                                                    |
| Materials (GPS)                     | Cu-nite brass, Stainless steel, Reinforced thermoplastic |

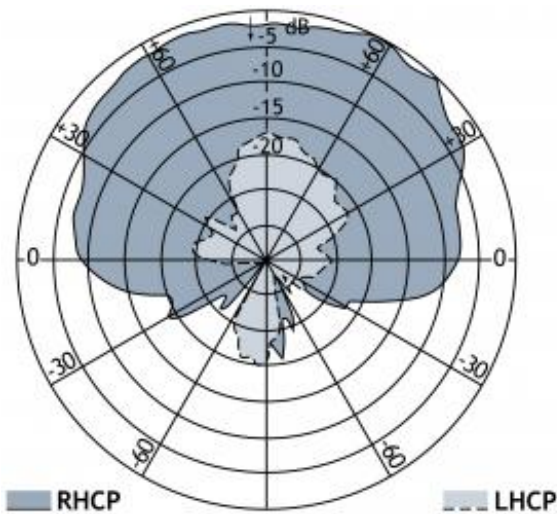
ADDITIONAL DATA



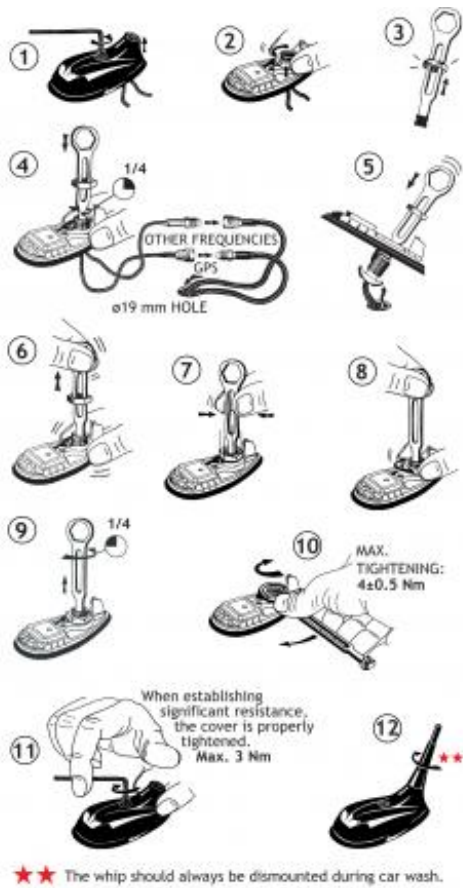
TYPICAL RESPONSE CURVES



VERTICAL RADIATION PATTERN



MOUNTING INSTRUCTIONS



CABLE MOUNTING

