

## colinear Mobile Antenna for the 4m and TETRA Bands

### DESCRIPTION

- External antenna whip mounted on the GPS-Combi mount.
  - Polyethylene-covered flexible whip.
  - Easily removable whip for car wash.
- GPS-antenna for fixed installations.
  - Full hemispherical coverage.
  - Built-in high-gain, low-noise amplifier.
  - Right-Hand Circular Polarization (RHCP).
  - 5 V supply voltage (3 V and 12 V respectively available on request).
  - DC supply via RF-connector.
  - Matching unit (BBMU) included.



### ORDERING

| Type                     | Product No. | Description                  |
|--------------------------|-------------|------------------------------|
| GPS-C 4/TETRA-S BBMU     | 132000139   | MAX. ROOF THICKNESS 2.5 mm   |
| GPS-C 4/TETRA-S BBMU/7mm | 132000129   | ROOF THICKNESS: 3.5 - 7.5 mm |

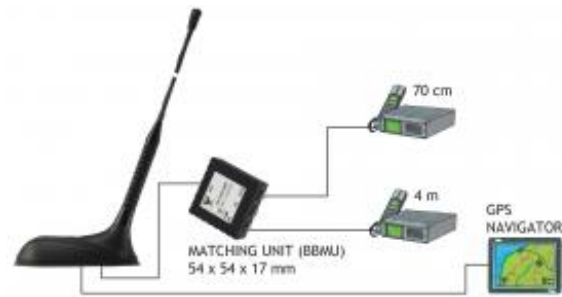
### SPECIFICATIONS

| Electrical              |                                                                  |                      |
|-------------------------|------------------------------------------------------------------|----------------------|
| Model                   | GPS-C 4/TETRA-S BBMU/...                                         | GPS-COMBI MOUNT      |
| Frequency               | 4 m: 74.2 - 87.5 MHz<br>70 cm: 380 - 400 MHz                     |                      |
| Antenna Type            | Collinear mobile antenna                                         | Active patch antenna |
| Max. Input Power        | 15 W                                                             |                      |
| Polarisation            | Vertical                                                         | Circular             |
| Pattern Type            | Hemispherical                                                    |                      |
| Impedance               | 50 Ω                                                             | 50 Ω                 |
| VSWR                    | 74.2 - 77.7 and 84 - 87.5 MHz: = 2.5:1<br>380 - 400 MHz: = 2.0:1 |                      |
| Gain (EIA RS-329-1)     | 4 m: approx. -3 dB<br>70 cm: approx. 1 dB (acc. to EIA RS-329-1) |                      |
| Cross Polar Attenuation | > 10 dB (typ.)                                                   |                      |
| Selectivity             | > 45 dB down @ +/- 45 MHz                                        |                      |

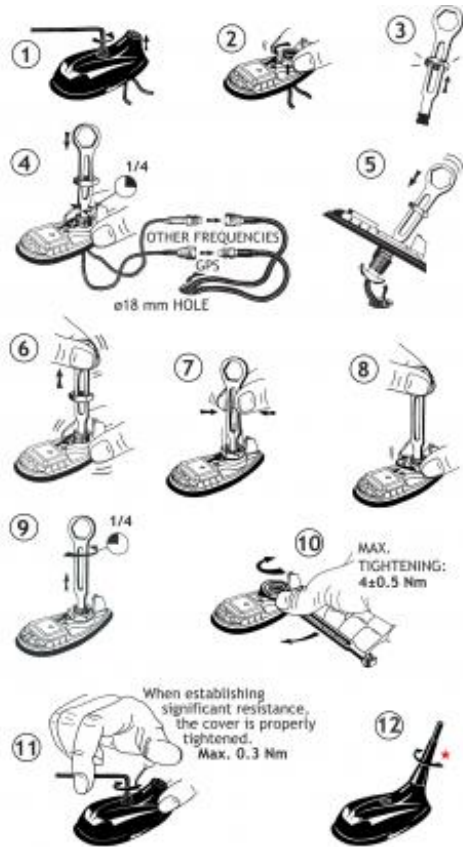
| Mechanical          |                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Connection(s)       | FME (male for GPS) + FME (female for mobile antenna)                                                                                  |
| Materials           | Whip: Glass fibre whip with copper wire winding, polyethylene-covered<br>Black-chromed brass<br>Spring: Black-chromed stainless steel |
| Colour              | Black                                                                                                                                 |
| Max. Roof Thickness | Max. 2.5 mm or 3.5 - 7.5 mm                                                                                                           |
| Height              | 670 mm / 26.38 in.                                                                                                                    |
| Weight              | 0.06 kg / 0.13 lb                                                                                                                     |
| Mounting            | On the GPS-Combi mount                                                                                                                |

| GPS Antenna                         |                                                          |
|-------------------------------------|----------------------------------------------------------|
| P1dB (GPS Amplifier)                | Approx. +7 dBm                                           |
| Gain (GPS)                          | 28 dBic in axial direction (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                                       |
| Colour (GPS)                        | Black                                                    |
| Materials (GPS)                     | Cu-nite brass, Stainless steel, Reinforced thermoplastic |

ADDITIONAL DATA

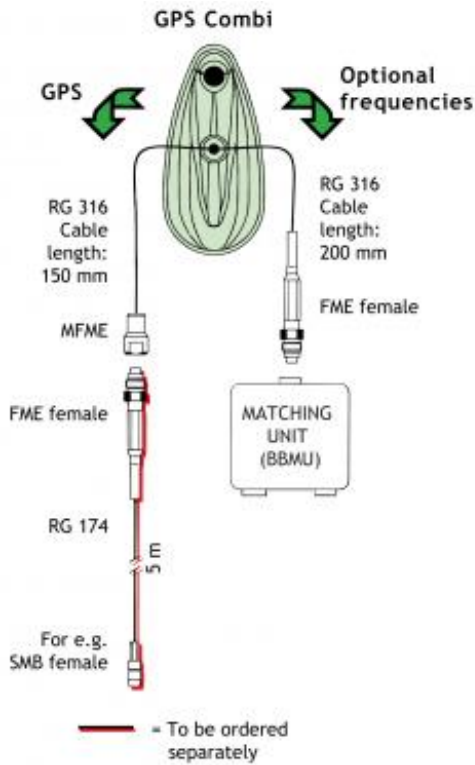


MOUNTING INSTRUCTIONS



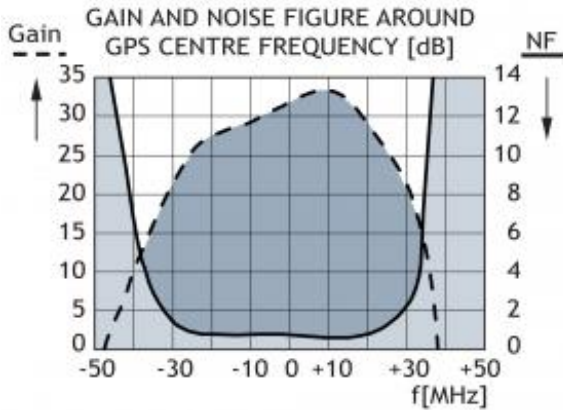
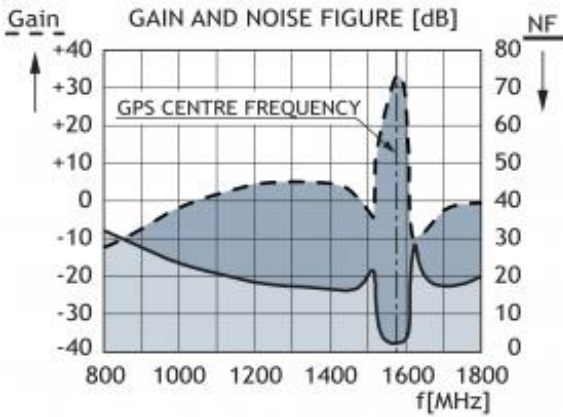
★ The whip should always be dismantled during car wash.

CABLE MOUNTING



PLEASE NOTE  
The cable between the GPS-C Mount and BBMU box must not be extended.

TYPICAL RESPONSE CURVES



VERTICAL RADIATION PATTERN

