

## GPS SOLUTION FOR ANTENNA POINTING

# 3011 Mobil+

### GPS PERFORMANCE FOR SUPERIOR ACCURACY

With the introduction of the 3011 Mobil+™ GPS Compass, Thales Navigation offers a system for easy, fast and accurate orientation of mobile phone base station or any directional antenna.

### IMPROVE YOUR SITE MEASUREMENTS

The 3011 Mobil+ orientation accuracy is better than 0.5° and its position accuracy is 2-3 meters. In contrast to conventional measurement equipment, the 3011 Mobil+ is fixed on the antenna itself and excludes any shift. As a result the orientation and position correspond to the true antenna pointing and allows the user to correct and improve the quality of his network coverage.

### A TURNKEY SOLUTION FOR YOUR APPLICATIONS

The system includes one GPS receiver, two GPS antennas, a special mounting bracket compatible with mobile network antennas, a Pocket PC and terminal software.

The 3011 Mobil+ GPS Compass is a cable-free system and features Bluetooth™ data transfer. After registration of the basic antenna location and orientation data, the whole survey data is logged in a downloadable file available for you to verify the precision of your work and to archive the job.

The 3011 Mobil+ system is easy to set-up and operate, provides solutions quickly and is guaranteed even in highly magnetic environments.



### ROBUST AND LIGHTWEIGHT

The aluminium construction of the antenna bracket is designed for single-handed use and fits onto all common mobile network antennas. The carrying cases are designed specifically for the tough everyday routine of engineers.

The 3011 Mobil+ system was developed wholly in cooperation with major mobile network providers.

### GPS/GNSS Receiver Features

- 12 GPS independent channels
- 4 WAAS/EGNOS channels
- L1 C/A Code and Phase with multipath processing
- GYROSKY® technology for dual antenna acquisition with single cable and fast and non-ambiguous heading determination
- Acquisition time:
  - 90 sec on start-up
  - 15 sec in reacquisition
- Manual and automatic calibration

### Accuracy / Precision<sup>(1)</sup>

- Azimuth: 0.5°<sup>(1) (2)</sup>
- Pitch: 0.8°<sup>(1) (2)</sup>
- Horizontal: 3 m (10 ft)<sup>(1)</sup>
- Vertical: 5 m (17 ft)<sup>(1)</sup>
- Angular resolution: 0.01°

### Interface

- 1 RS232 port
- 2 RS422 port
- 1 Event input (TTL compatible)
- 1 PPS output
- 1200 to 115200 bauds
- NMEA 0183 protocol V3.0

### Technical Specifications

#### GPS Receiver Environmental

- Protection
  - Calculator: IP42
  - Antenna: IP66 (waterproof)
- Operating temperature:
  - Calculator: -20°C to +55°C
  - Antenna: -40°C to +70°C
- Storage temperature: -40°C to +70°C
- Vibration: EN60945
- Shock : ETS 300 019
- EMI: EN60945, FCC Part15 Class B

### Physical

- Size: 264 x 64 x 215 mm  
10.39 x 2.51 x 8.66 in
- Weight: 1.8 kg (4 lb)

### Electrical

- Power supply: 9-36 VDC
- Consumption: < 15 W
- Battery: Li-Io 6000 mAh

### Standard Features

#### Software features

- Application software:
  - Pocket PC version
  - Windows® version

#### • Communication with GPS unit via:

- Bluetooth
- Serial cable

#### • Input of:

- Site data
- Company information
- Electrical & mechanical down tilt

#### • Measurement:

- Input of expected heading
- Display of measured heading and difference with expected value
- Precision measurement
- Recording of measurement data

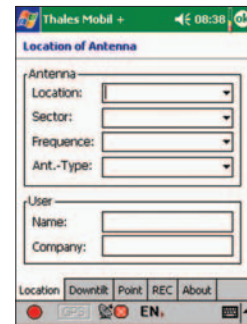
### Standard delivery list

- GPS receiver
- GPS antenna x2
- Bluetooth module
- Antenna rod and bracket
- RF cable (5 m)
- Battery x2 and battery charger
- Carrying case x2
- CD-ROM with manual and software

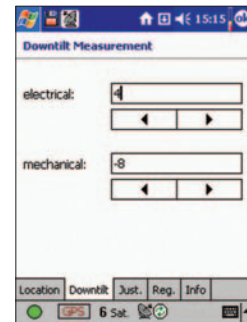
### Optional Features

#### Terminal

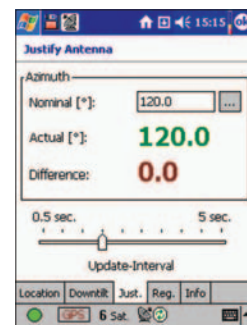
- Pocket PC Operating System
- Integrated Bluetooth



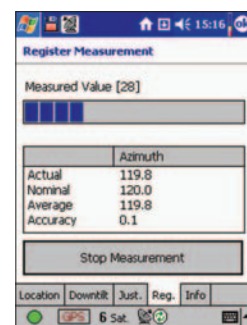
Location and Company Data



Down tilt - Input



Azimuth input and pointing



Fine calculation and data saving

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Thales Navigation follows a policy of continuous product improvement; specifications and descriptions are thus subject to change without notice. Please contact Thales Navigation for the latest product information.

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(1) All performance figures are 1 rms values measured in normal conditions of GPS reception (normal ionospheric activity, 5 SVs used and HDOP<4 on a clear site).

(2) With a 0.6 m antenna baseline