

# MobileMapper® 50



## Datasheet



## Slim and Strong

### Key Features

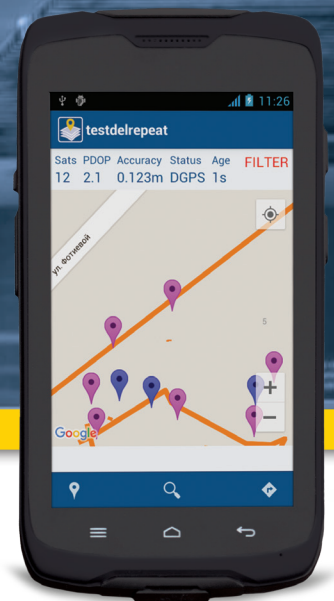
- Compact and lightweight
- Wi-Fi only and 4G versions
- Enhanced GNSS with postprocessing
- Strong, waterproof casing - IP67
- Google Mobile Services
- Complete field and office mapping solution
- Easy-to-learn, easy-to-use field software
- 3 year warranty

## MobileMapper® 50

The MobileMapper 50 is a new generation GIS data collector running on Android which offers state of the art smartphone capabilities combined with rugged professional quality and improved GNSS performance.

The MobileMapper 50 is very compact, lightweight and unique in being a professional grade data collector in a consumer smartphone form factor. The receiver is slim, highly rugged and very powerful (1.2 GHz quad core processor, 16GB memory and 5.3" display) and also offers GNSS accurate positioning (GPS + GLO or GPS + Beidou) as well as post processing.

Professional field users are strongly influenced by the consumer space and yet, at the same time, need to maximize operational efficiencies. With the MobileMapper 50 both requirements are addressed through full connectivity (depending on the version), superior accuracy, large memory and display all in a slim and compact design.



# MobileMapper® 50 Specifications

## GNSS Characteristics

- Internal antenna: 72 channels
  - GPS L1 C/A
  - GLONASS L1 C/A
  - Beidou B1
  - QZSS L1 C/A
  - SBAS: WAAS/EGNOS/MSAS/GAGAN
  - Dual constellation system: GPS/GLONASS or GPS/Beidou
- External antenna connector
- NMEA output
- Raw data recording

## Accuracy Specifications

### (Horizontal RMS) <sup>1</sup>

- Real-time SBAS: < 1.5 m typical
- Post-processed: < 80 cm typical

## Processor

- Qualcomm Snapdragon 410
- Quad-core
- Clock frequency: 1.2 GHz

## Operating System

- Android® 5.1 (Google certified)
- Languages available: Afrikaans, German, English, Spanish, French, Italian, Portuguese (Portugal and Brazil), German, Italian, Japanese, Korean, Simplified Chinese, Greek, Russian
- Software package includes: Google Mobile Services, U-Center application

## Communications

### Cellular

- GSM (850,900,1800,1900), GPRS, EDGE, UMTS, WCDMA (B1, B2, B5, B8), HSPA, TD-SCDMA (B34, B39), LTE-FDD(B1, B3, B4, B5, B7, B8, B17, B20, B28), LTE-TDD (B38/B39/B40/B41)  
(not available on Wi-Fi only version)
- Wi-Fi (IEEE) 802.11 b/g/n
- Bluetooth 4.0 dual mode
- USB (micro B USB connector)
- NFC (not supported in Wi-Fi only version)

## Physical Characteristics

### Size

- 164x82x14.6 mm (6.45x3.22x0.57 inches)

### Weight

- 310 g with extended battery (278 g for Wi-Fi only version with standard battery)

### User Interface Keyboard

- 2 volume keys, on/off/reset key, 2 programmable keys, standard Android touch panel buttons
- On screen keyboard

### Display

- Size: 5.3" capacitive multi touch
- Resolution: 1280x720 pixels
- Brightness: 450 Cd/m<sup>2</sup>
- Gorilla Glass damage-resistant
- Auto rotate

### Memory

- 2 GB SDRAM
- Storage: 16 GB (non volatile). 8 GB for Wi-Fi only version <sup>2</sup>
- MicroSDHC™ memory card (up to 64 GB, SanDisk®, Kingston® recommended)

## Environmental Characteristics

- Operating temperature: -20° to +60°C (-4 to 140°F)
- Storage temperature: -30° to +70°C without battery (-22 to 158°F)
- Humidity: 95% non condensing
- Water & dust proof: IP67
- Free drop: 1.2 m on concrete

## Power Characteristics

- Battery Li-Ion, 4800mAh (3100mAh for Wi-Fi only version)
- Battery life: > 15 hrs @ 20 °C with GPS on <sup>3</sup>
- Charging time: 4 hours
- Removable battery

## Interface

- USB 2.0 (micro)
- External antenna connector
- Audio jack 2.5 plug (CTIA/AHJ standards)
- Pogo pin connector (Serial, USB, Power in)

## Multimedia & Sensors

- Rear camera 13 M pixels with flash light (8 M pixels on Wi-Fi only version)
- Front camera 2 M pixels
- E-Compass (not supported in Wi-Fi only version)
- G-sensor
- Speaker
- Microphone
- Light sensor

## Standard Accessories

- Lanyard
- Screen protectors (x2)
- A/C charger
- USB cable

## Optional Accessories

- External magnetic GPS antenna
- Pole bracket
- High capacity battery: 4800 mAh

<sup>1</sup> Accuracy performance achieved in good conditions (open sky) with GPS/GLO and more than 7 satellites in view (with SNR> 45 dBHz) (including 1 SBAS).

<sup>2</sup> These are full capacity, but available memory space is lower as operating system and pre-loaded applications take part of the memory.

<sup>3</sup> With high capacity battery, backlight on at 70% brightness, and all wireless off.

Specifications can change without notice

	MobileMapper 50 Wi-Fi	MobileMapper 50 4G
p/n	107705-00	107705-10
Wi-Fi	√	√
Cellular		√
Rear Camera	8 Mp	13 Mp
Storage memory	8 GB	16 GB
Battery	3100 mAh	4800 mAh
e-Compass		√
NFC		√

## Contact Information:

### AMERICAS

Spectra Precision Division  
10368 Westmoor Drive  
Westminster, CO 80021, USA  
+1-720-587-4700 Phone  
888-477-7516 (Toll Free in USA)

### EUROPE, MIDDLE EAST AND AFRICA

Spectra Precision Division  
Rue Thomas Edison  
ZAC de la Fleuriaye - CS 60433  
44474 Carquefou (Nantes), France  
+33 (0)2 28 09 38 00 Phone

### ASIA-PACIFIC

Spectra Precision Division  
80 Marine Parade Road  
#22-06, Parkway Parade  
Singapore 449269, Singapore  
+65-6348-2212 Phone



www.spectraprecision.com