

# Handheld GNSS Receiver Champion MVP



*Quality Performance  
You Can Count On.*



The MVP features the Trimble BD920 receiver module supporting multiple constellations. This delivers the quickest and most reliable RTK initializations for 1-2 centimeter positioning. For applications that do not require centimeter accuracy, the BD920 contains an advanced kalman filter PVT engine that delivers high accuracy GNSS, DGNSS positions in the most challenging environments such as urban canyons.

## Features

- ▶ Multifunctional handheld GNSS receiver
- ▶ GPS, GLONASS, BeiDou, Galileo
- ▶ 1 cm horizontal, 1.5 cm vertical
- ▶ Handheld or with external antenna
- ▶ Built-in GSM modem
- ▶ IP67 water/dustproof
- ▶ Able to withstand a 6 ft drop to concrete
- ▶ 2 year warranty

# Champion MVP



**Champion**  
INSTRUMENTS

# Champion MVP

## GNSS Specifications

Satellite systems tracked simultaneously	
GPS	L1 C/A, L2C, L2E
GLONASS	L1, L2 C/A
SBAS	L1 C/A
Galileo	E12
QZSS	L1 C/A, L1 SAIF, L2C

## Performance Specifications

Static and Rapid Static	
Horizontal	2.5 mm + 0.5 ppm RMS
Vertical	5 mm + 0.5 ppm RMS
Code Differential GNSS Positioning	
Horizontal	25 cm + 1 ppm RMS
Vertical	50 cm + 1 ppm RMS
SBAS	0.50 m horizontal, 0.85 m vertical
Post Process Kinematic	
Horizontal	1 cm + 1 ppm RMS
Vertical	2.5 cm + 1 ppm RMS
Initialization Reliability	Typically > 99.9%
RTK Surveying	
Horizontal	8 mm + 1 ppm RMS
Vertical	15 mm + 1 ppm RMS
Initialization Time	Typically < 8 seconds
Initialization Reliability	Typically > 99.9%

## Physical Specifications

Size	211 mm x 100 mm x 58 mm
Weight	1.4 lbs (635 g) with battery
Display	3.7 in colorful TFT high resolution, readable under sunlight touchscreen, LED backlight

## Environment

Operating Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Storage Temperature	-40 °C to +80 °C (-40 °F to +176 °F)
Humidity	100% condensation
Waterproof & Dustproof	IP67
Drop	2 m protection

## Electrical

Battery	Lithium battery, 6200 mAh/3.7 V
Battery Life	12 hours continuous work
Charging Time	7 h

Specifications are subject to change without notice. Champion, Champion MVP are trademarks of Champion Instruments, LLC.

## Communication and Data Storage

Internal Memory	64MB
Camera	2 megapixel
Internal triple frequency antenna	
Data Formats (from 1 Hz positioning output up to 50 Hz) CMR SCMRX, CMR, CMR input and output	
RTCM RTCM 2.1, RTCM 2.2, RTCM 2.3, RTCM 3.0, RTCM 3.1 input and output	
Navigation Outputs ASCII NMEA-0183 GSV, AVR, RMC, HDT, VGK, VHD, ROT, GGK, GGA, GSA, ZDA, VTG, GST, PJT, PJK, BPO, GLL, GRS, GBS	
I/O Interfaces	1x Bluetooth Class 2, 1x standard USB 2.0 port, 1x RS232 serial port, 1x DC power input (8-pin & 5-pin)
GSM Modem	Included; Network RTK (via CORS) range 20 - 50 km



We will not let you fail.



eGPS Solutions  
4317 Park Drive  
Suite 104  
Norcross, GA 30093

t: 770.695.3361  
f: 770.695.0803  
info@egps.net  
www.egps.net

