

FORGE

FORGE HANDHELDS



www.F4Devices.com

GPS	L1C/A
ULTRASONIC DISTANCE SENSOR	Up to 75 ft (22.86 m)
ULTRASONIC DISTANCE ACCURACY	<0.8%, at the 99% of Confidence Interval
MEMS	Gyro, E-Compass, G-sensor
ACCURACY	up to 0.017332 meter/100 meter
MEMS AUTO CALIBRATION	Optional
MEMS OUTPUT NMEA-0183	Optional

THE FORGE SERIES HIGHLIGHTS

ACCURACY	1-3 meter(s)
CANOPY MODE	1-5 meter(s)
3.5G CELLULAR MODEM	Optional
INTEGRATED CAMERA	5 MP

The Forge product line was designed to bring together several essential tools into one device. The Forge Echo series combines the most precise GPS technology with an incorporated clinometer that measures slope and vertical angles. Pair this with groundbreaking, patent-pending echodistance technology, and the rugged forestry centric data collector, the Forge Echo makes it easier than ever to measure accurate distance and tree heights.

QUICK PRODUCT COMPARISON

IN THE PRODUCT BOX

- Forge series handheld
- Rechargeable battery pack
- Ultrasonic Transponder
- 9V Battery for the transponder
- USB data cable
- AC Power adaptor
- Screen protector kit
- Spare stylus & tether
- Documentation

Tools	Forge 912	Forge Echo 912	Forge 952	Forge Echo 952
Echodistance		✓		✓
Height Measurement		✓		✓
GPS/WIFI/Bluetooth	✓	✓	✓	✓
3.5 G Cellular			✓	✓
5 MP Camera	✓	✓	✓	✓
8 GB On Board Storage	✓	✓	✓	✓
512 MB SDRAM Memory	✓	✓	✓	✓
800 MHz Processor	✓	✓	✓	✓
Micro SD (32 GB)	✓	✓	✓	✓
3.5" (8.89 cm) Display Size	✓	✓	✓	✓
Win Mobile 6.5 Classic Operating System	✓	✓	✓	✓

GNSS

CHANNELS	52
SYSTEMS	GPS, WAAS/EGNOS/MSAS
UPDATE RATE	1 Hz
TIME TO FIRST FIX	39 s (typical)
NMEA-0183 SUPPORT	Optional
RTCM SUPPORT	RTCM2.x
RAW DATA	to Rinex available

GNSS ACCURACY

REAL-TIME AND POSTPROCESSED GMS-EZS (HRMS) FORGE CONFIGURATION WITH POST-PROCESSING	Autonomous Accuracy: 1-3 meters SBAS (WAAS/EGNOS/MSAS): typically < 1 m
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*Accuracy: 75 cm + 1.0 ppm

REAL-TIME DGPS WITH GEOASSIST NTRIP (HRMS)	SBAS (WAAS/EGNOS/MSAS): typically < 1 m
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POSTPROCESSED DGNSS (HRMS) FORGE CONFIGURATION WITH POST-PROCESSING	*Horizontal/ Static (over 30 minutes): 1 cm + 1.0 ppm *Horizontal/ Stop and Go (over 30 seconds): 50 cm + 1.0 ppm
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* All above with External Antenna and Pole

HARDWARE SPECS

BATTERY	
Type:	Rechargeable, removable Li-Ion, 3800mAh
Capacity:	11.1 V 2.5 AH
Charge time:	4 hours (typical)
BATTERY RUN TIME	
GNSS:	9—11 hours
GNSS & WI-FI:	8—9.5 hours
GNSS & Cellular:	6.5—7 hours
Standby time:	35 days (typical)
PROCESSOR	Samsung 6410, 800 Mhz
RAM	512 MB
FLASH	8 GB
EXTERNAL STORAGE	SD/SDHC up to 32 GB
DISPLAY	
Type:	Transflective LED-backlit LCD
Size:	3.5" (diagonal)
Resolution:	480x640
Luminance:	300 cd/m2

CELLULAR & WIRELESS

UMTS/HSDPA	850/900/2100 MHz
GPRS/EDGE	850/900/1800/1900 MHz
WIFI	802.11 b/g
BLUETOOTH	Version 2.1 + EDR

CAMERA

STILL MODE	Auto Focus 5 MP
STILL IMAGE FORMAT	JPG
VIDEO MODE	Up to VGA Resolution
VIDEO FILE FORMAT	WMV with audio
GEOCAMERA	with Lat/ Lon/ Sat. Status and coordinated offset capability

ENVIRONMENTAL TOLERANCES

TEMPERATURE	
Operation:	-20 °C to +60 °C (-4 °F to +140 °F)
Storage:	-30 °C to +70 °C (-22 °F to +158 °F)
MECHANICAL SHOCK	
Drop:	1.2 m (4 ft) plywood over concrete
Vibration:	Method 514.5
ALTITUDE & HUMIDITY	
Relative humidity:	95% non-condensing
Maximum operating altitude:	3,658 m (12,000 ft)
Maximum storage altitude:	5,000 m (16,400 ft)
INGRESS PROTECTION	
Water/Dust:	IP65

SOFTWARE COMPATIBILITY

MOBILE SOFTWARE

- SilvAssist Mobile
- BAP GMS-EZS for Postprocessing
- GIS360
- GPS controller software

DESKTOP SOFTWARE

- SilvAssist 3.0 with Cloud available
- BAP GMS EZSurv Desktop for Postprocessing
- BAP Precision Toolchain for Rinex Converter
- GIS360

AVAILABLE LANGUAGES

English, Spanish, French, German, Traditional Chinese, and Simplified Chinese

CONNECTORS & INPUTS

- Internal microphone and speaker
- Mini USB connector
- DE-9 serial via optional USB to serial converter
- External power connector
- SIM slot
- SDHC card slot

OPTIONAL ACCESSORIES

- External GNSS antenna
- 1.5 m - 5 m external antenna cable
- Range pole kit for external antenna
- Backpack kit for external antenna
- Vehicle mount
- Hard or soft carrying case
- USB to serial converter cable