



- + FASTER, EASIER GIS DATA CAPTURE.
- + SAFELY CAPTURE UNSAFE LOCATIONS.
- + MANY LOCATIONS : SINGLE POINT.
- + GET VERIFIABLE GEOTAGGED PHOTOS.

ikeGPS Specifications

PHYSICAL

Size: 11.8" x 4.3" x 3.1" (300mm x 110mm x 80mm)
 Weight: 2.6lbs (1200g)
 Tripod Mount: Standard Camera 1/4"
 Main Connector: Power/USB/RS232/RTCM
 Touch Screen: Over LCD display
 Buttons: 4 user programmable
 Casing: Plastic (ABS + polycarbonate)
 Protection: IP645
 Battery: Internal rechargeable Li-Polymer
 Operation Time: 6 to 8 hours*
 DC Input: 11 to 17 Vdc @ 1.5A max
 Charging Time: 3 - 4 hours

DISPLAY

Screen Size: 3.5" diagonal
 Screen Resolution: 64k color Transflective
 Viewable Image: 320 x 240 pixels

LASER DISTANCE METER

Laser Range:****

Model	Maximum Range
ike105	100m
ike205	300m
ike305	1000m

Laser Accuracy: $\pm 0.5m + 0.5\%$ of range
 Wavelength: 905nm (invisible infrared)
 Safety: Class 3R Safe to naked eye over all distances.

COMPUTER

Processor: 624MHz Intel® PXA 270 processor
 RAM: 64MB
 Non-volatile System Memory: 128MB Flash ROM
 Non-volatile Storage Memory: Removable SD card 1GB
 Operating System: Microsoft Windows Mobile 5
 Communication: USB 1.1, Bluetooth, Wi-Fi and RS232

GPS

Channels: 12 channel parallel "all in view" tracking
 Frequency: L1 C/A code and carrier phase
 Update Rate: 1Hz
 Autonomous Position Accuracy: < 5m (SEP)
 Antenna: Built in patch antenna, or optional external antenna via TNC connector
 DGPS Position Accuracy: < 1m (SEP) **
 Typical Times:
 • First Fix (Cold Start): 2.5 min
 • First Fix (Warm Start): 45 s
 • First Fix (Hot Start): 22 s
 Multipath Mitigation: Yes
 DGPS Real Time: RTCM-SC104 Messages

Datum: User Selectable
 DGPS Post Processing: Optional.
 SBAS (WAAS, EGNOS): Supported.

DIGITAL CAMERA

Model	Max. Resolution
ike105	1.3 Mega Pixels (1280 x 1024)
ike205	3.2 Mega Pixels (2048 x 1536)
ike305	3.2 Mega Pixels (2048 x 1536)

24 bit color

Output Image Format: JPEG or Bitmap

SOFTWARE***

Data Capture Applications:

- CSV file format
- ArcPad™ shapefile format

Desktop synchronization: ikeSync

OPTIONAL SOFTWARE***

DGPS Post Processing:

- ikeSync including DGPS Post-Processing powered by Waypoint® GrafNav Lite™
- ESRI® ArcPad Application Builder
- ike Software Development Kit

On board GIS:

- ESRI® ArcPad

DIGITAL COMPASS

Accuracy (Tilt 0° to 30°): 3.0° RMS
 Accuracy (Tilt 30° to 60°): 4.0° RMS

INCLINOMETER

Roll and Pitch Range: $\pm 60^\circ$
 Accuracy (0° to 30°): 0.4°
 Accuracy (30° to 60°): 1.0°

* Depending on method of operation

** Sub-meter accuracy specification requires data to be collected with a minimum of five satellites, a maximum Position Dilution of Precision (PDOP) of four, minimum satellite Signal to Noise Ratio (SNR) of 30dB, minimum satellite elevation of fifteen degrees and reasonable multipath conditions. Ionospheric conditions, multipath signals or obstructions of the sky by buildings or dense trees may degrade precision by interfering with signal reception. Wide Area Augmentation System (WAAS) is only available in North America, European Geostationary Navigation Overlay Service (EGNOS) is only available in Europe.

*** Other third party applications are available for ikeGPS

**** Laser distance meter range and accuracy may vary depending on target and atmospheric conditions (fog, rain etc)
 Please note that due to constant improvement of our products, Surveylab Ltd reserves the right to update specifications without notice.