Earth Science Systems

ESSENTIAL UNDERGROUND INFORMATION

GPS Base Station

Positioning Enhancement Accessory

Integrates advanced GPS technology to enable effortless precision location data for compatible Earth Science Systems equipment. Eliminates manually-constructed survey grids.

The **ESS GPS Base Station** assists compatible Earth Science Systems products, allowing them to achieve ½ inch (1 cm) position precision (relative to the base station). Precise positioning eliminates manually laid-out survey grids and hassles caused by coarse and drifting GPS position data.

The dual-band quad-constellation Global Navigation Satellite System (GNSS) receiver is the best corrections source for ESS products.

Just set out and turn on: The GPS Base Station is fully automatic. Once paired with your ESS device, there is nothing to configure.

Designed for both urban and rural survey environments with integrated cellular and WiFi connectivity. Cellular connectivity enables miles of range, while the integrated high-gain WiFi antenna allows precision positioning up to 400 ft (122 m) away in open areas without cellular service.

Earth Science Systems, LLC – 11485 W. I-70 Frontage Rd. – Wheat Ridge, CO – USA
www.earthsciencesystems.com – Tel: 303-800-2000

GPS Base Station

Hassle-Free Precision Positioning

Virtual Survey Grid
Pilot your ESS Scanner on-screen with live feedback, like driving a car with GPS.

Automatic Startup
Turn on in a corner of your survey, the rest is automatic.

Easy Pairing
Built-in web-interface for changing paired ESS Scanner.

Automatic Wireless Switching
Stays linked using both WiFi and cellular (manual override available).

"No Service"? No Problem
No cell signal needed for medium-sized open areas.

Specifications

- Typical* Rover Relative Accuracy (RTK Fix): ½ inch (1 centimeter)
- Typical* Absolute Accuracy: 6 feet (1.8 meters)
- Concurrent quad-constellation GNSS:
  - GPS L1C/A L2C
  - GLONASS L1OF L2OF
  - Galileo E1B/C E5b
  - BeiDou B1I B2I
- Integrated 5 GHz High-gain WiFi Antenna
  - WiFi range is site-dependent
  - Tested to 400ft (122m) line-of-sight with ESS GPR Utility Scanner
- Integrated Cellular Connectivity
  - Requires subscription through Earth Science Systems.
- IP65 ingress protection
- Integrated 62Wh LiFePO4 battery
- 20 hours operation on a single charge
- Compatible with select Earth Science Systems products only
- Device dimensions (excluding tripod): 3.3 x 4.3 x 17 inches (8.2 x 11 x 43 cm) 4.4 lbs. (2 kg)

* Typical performance may not be achievable in all locations or at all times. Like all GNSS devices, performance may be degraded by multi-path interference, satellite visibility, atmospheric conditions and other factors.

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