

# ELECTRICAL DENSITY GAUGE (EDG) (G851)

Category: Monitoring



**Product Code:** G851

**Category:** MONITORING

**Sub-Category:** DENSITY DETERMINATION

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- The Electrical Density Gauge (EDG) is a non-nuclear, portable instrument used for rapid, in-situ determination of soil compaction quality, measuring wet and dry density,

gravimetric moisture content, and percent compaction.

- Utilizing high-frequency electromagnetic waves, the EDG assesses the dielectric properties of compacted soils, providing accurate measurements without the regulatory concerns associated with nuclear devices.
  - The device features a user-friendly interface with a step-by-step menu, guiding operators through the testing procedure and alerting when values deviate from established calibration curves.
  - Equipped with GPS functionality, the EDG records geolocation data alongside test results, facilitating comprehensive documentation and quality control in construction projects.
  - The EDG's lightweight and battery-powered design ensures ease of transport and operation in various field conditions, making it ideal for monitoring day-to-day compaction activities.
  - Test results from the EDG correlate well with traditional methods such as the sand cone test and nuclear density gauges, offering a reliable alternative for field compaction assessment.
  - Data management is streamlined with the ability to store, download, and delete project data via USB, enhancing efficiency in reporting and analysis.
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## **STANDARDS**

ASTM D7698 • AASHTO T343

## **TECHNICAL SPECIFICATIONS**

- Measurement Parameters: Wet density, dry density, gravimetric moisture content, percent compaction
- Measurement Method: Electromagnetic wave-based dielectric assessment
- Data Storage: Internal memory with USB download capability
- GPS Functionality: Integrated for geolocation tagging of test results
- Power Supply: Rechargeable Li-ion battery
- Operating Temperature Range: 0°C to 50°C
- Humidity Range: 5% to 90% RH

## **EQUIPPED WITH**

- Main Console with Touch Screen Display
- Soil Sensor and Cables
- Temperature Probe
- GPS Module
- Battery Charger

## **SUPPLIED WITH**

- Set of 4 Tapered Darts (6")
- Dart Template
- Field Verifier
- Carrying Case

**ORDERING INFORMATION**

| Item Name                      | Item Code |
|--------------------------------|-----------|
| ELECTRICAL DENSITY GAUGE (EDG) | G851X00AB |

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*Keywords: Electrical Density Gauge, EDG, Soil Compaction Testing, Non-Nuclear Density Gauge, ASTM D7698, AASHTO T343, In-Situ Density Measurement, Soil Moisture Content, Geotechnical Field Equipment, GPS-Enabled Soil Tester*