

**SOIL > DENSITY DETERMINATION** 

# **ELECTRICAL DENSITY GAUGE (EDG)**

Code: G851



- 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.

#### **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                           | Code      |
|--------------------------------|-----------|
| ELECTRICAL DENSITY GAUGE (EDG) | G851X00AB |