

NON-NUCLEAR SOIL ELECTRICAL DENSITY GAUGE SR-4500



STANDARD: ASTM D7698

- The Electrical Density Gauge (EDG) is a nuclear-free alternative for determining the moisture and density of compacted soils used in road beds and foundations
- ✦ it does not require a highly-trained or licensed technician,
- ✦ it does not require special handling for shipping or regulatory compliance for hazardous materials
- ✦ it is easy to learn and easy to use with its step-by-step menu
- ✦ lightweight and easily transportable
- ✦ it is accurate and repeatable with results that mirror known testing methods

COMPONENTS



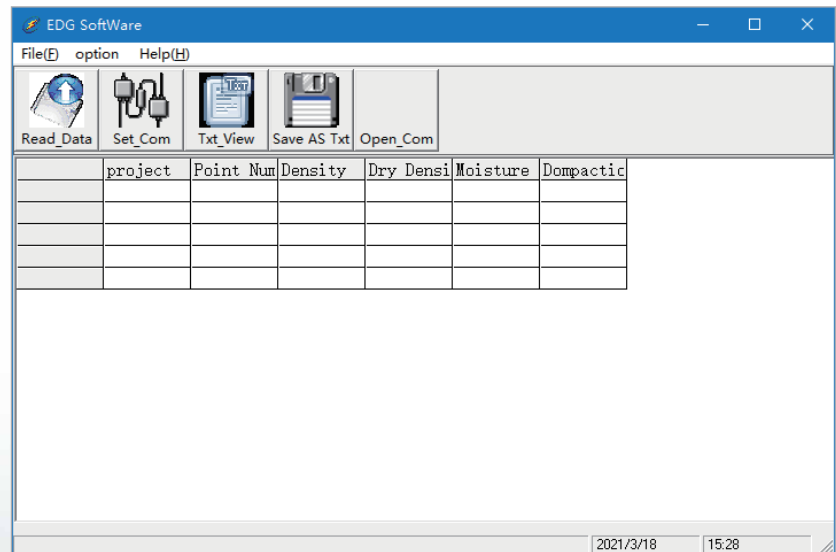
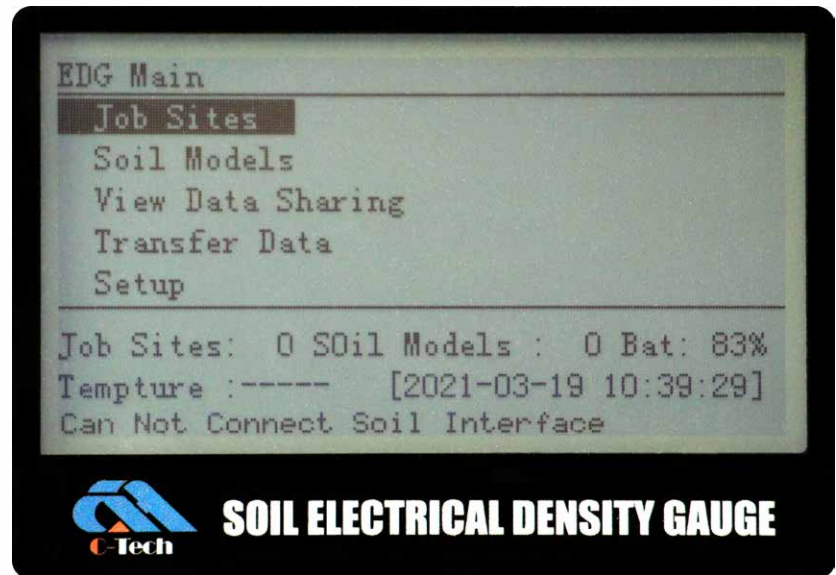
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SOFTWARE

The software will allow you to communicate effortlessly with your EDG gauges and only requires minimal setup by the user. EDG Software provides a complete solution for the acquisition, storing, and presentation of Job and Soil Model data. EDG Software works in conjunction with Microsoft Excel to present test data in easy-to-read Excel workbook format files, which can be evaluated directly or sent to any computer using Microsoft Excel. Jobs can be grouped together within projects for organization and reporting.

SOFTWARE FEATURES

- Communicate with all your EDG gauges.
- Download Job Data.
- Create customized reports from downloaded job data.
- Download Soil Model Data.
- Create reports from downloaded soil model data.
- Upload soil models to any EDG.
- Input proctor data for use in job data or soil model data.
- Time/Date, GPS stamps for each test



OPERATIONAL SPECIFICATIONS:

MEASUREMENT MODE:

Average: Averages four (4) readings and stores data including location, date and time.

Functions: Wet & Dry Density, % Compaction, % Moisture

SOIL SPECIFICATIONS:

Designed to operate with standard soils used in civil construction projects.

Requires inputs from standard

- Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils (ASTM D4318)
- Particle Size Distribution (ASTM D422)
- Proctor Test (ASTM D698 and D1557)

Operating Temperature: 0°C to 50°C

MECHANICAL SPECIFICATIONS:

Weight: 10 kg

Dimensions: 600 x 460 x 370mm

MEASUREMENT SPECIFICATIONS:

Sensing Area: 9.5 in. (24.1cm) square Dart Template allows optimum measurement on fine and coarse material types. A larger sensing area can be achieved by customizing the darts and dart template.

Measurement Depth: The standard dart is 15cm, and 30, 50 and 80cm darts can be customized.

Measurement Display: Dry Density, % Compaction, % Moisture, GPS Data, Material Information and Project Name

Accuracy: The accuracy can reach $\pm 1\%$ except for the measurement of Collapsible loess. (The measurement accuracy of collapsible loess is $\pm 3\%$.)

ELECTRICAL SPECIFICATIONS:

Microprocessor Controlled

Battery: 2000mAh Ni-MH, 13.2V

Battery Time: about 12 hours

Battery Charger: 110-240 V 50/60Hz

OPERATIONAL FEATURES:

Display: 240*128 LCD screen display with backlight for easy visibility in daylight or dark situations

Status Bar: Displays GPS status, battery voltage, low battery and date and time

Project Details: Stores up to 60 projects with details

Soil Model: 15 sets of soil models can be stored

Material Details: Stores up to 20 materials, details include Material Name, Description, Max Dry Density, Opt. Moisture, Dry Density Offset, % Moisture Offset, % Greater than 3" , % Greater than 3/4" , % Gravel, % Sand, % Fines, PL, LL, Cu and Cc

Data Logging: Ability to store all measurements

Reports: Export to the computer software.

GPS Control: When activated will display latitude and longitude positions, number of satellites the gauge is connected to as well as the UTC date and time, also available in UTM format. GPS information will store with each measurement when Data Save feature is enabled, (Status Bar Icon)

Data Management: Quickly access, download or delete your project data

Set Time & Date: Quick time and date setup, MM/DD/YY and DD/MM/YY formats

Units: Interchangeable settings for Density (kg/m³, lb/ft³), Temp (°C, °F)

Standardization: While gauge is still in the case, a quick one touch measurement will ensure the gauge is still in proper working mode

Enhanced customer support: Diagnostic screen to aid in factory support

User Programmable Target Density: Used for calculating % compaction