# **TGM800**Thermogravimetric Moisture



# **TGM800: Thermogravimetric Moisture**

LECO's TGM800 is a high precision, automated thermogravimetric moisture determinator that utilizes a direct method for replacing traditional loss-on-drying analytical techniques that are labor intensive with long analysis times. Flexible method settings, automation, and hardware capabilities eliminate the need for samples to be manually weighed and transferred between a drying oven and desiccator for cooling prior to final mass measurement. Intuitive software with a touch-screen interface allows method configuration to match standard loss-on-drying test requirements. The TGM800 is applicable to a wide variety of sample matrices including food, feed, milled, and agricultural materials.

High sample throughput and minimal operator time allow you to maximize productivity and improve your work flow.

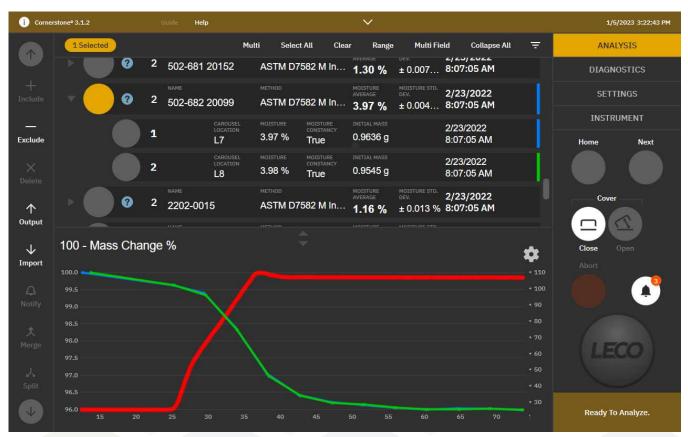
- Automated loss-on-drying moisture analysis of up to 16 samples
- Maximized throughput with rapid ramping of the oven temperature and fast cooling capability
- Optimized drying time with automatic end point recognition based upon sample mass constancy
- Limited sample interaction requirements reduce operator handling time



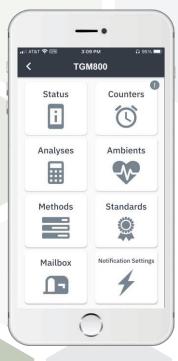


## **User-Friendly Cornerstone® Brand Software**

LECO's exclusive Cornerstone brand software with touch-screen interface enables complete access to analysis control, method settings, diagnostics, reporting, and more in a highly organized, intuitive, and immersive environment. Designed through a collaboration of customer feedback and innovative engineering, Cornerstone features all of the routine day-to-day operations within a single Analysis screen designed for speed and ease-of-use. Our innovative grouping of sample data into sets and replicates simplifies the data output and automatically calculates relevant statistics, alleviating the need for additional data processing.

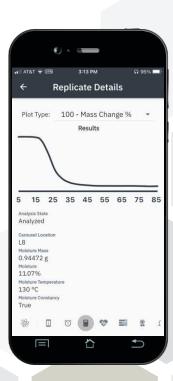


**Analysis** 



An optional Cornerstone Mobile application feature enables remote viewing of the instrument software from a smartphone, tablet, or PC.

It can also be programmed to set automatic notifications from the instrument against predefined software conditions using e-mail, text message, or the Cornerstone Mobile application.



#### **Software Features & Benefits**

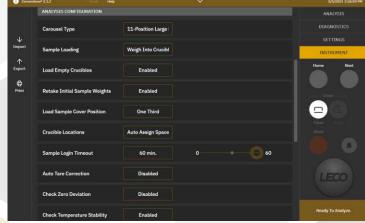
The software is divided into four main sections—Analysis, Diagnostics, Settings, and Instrument—for simplified navigation and organization. Toolbars, sliders, and drop-down menus make it easy to set parameters for data processing. The software also includes real-time monitoring of ambient parameters, with fully animated system diagrams.

Advanced interactive diagnostic features include a thorough digital on-board manual, maintenance animations, photo illustrations, and screen captures that quickly provide the direction needed without having to refer to multiple manuals.

Cornerstone supports a multilingual interface, user permissions, extended data archiving and filtering, compatibility with various Laboratory Information Management Systems (LIMS), and flexible reporting capabilities. Compliance to FDA regulations 21 CFR Part 11 for a closed analytical system is also supported.



**Diagnostics** ► Ambients



Instrument ► System



Settings ► Method

### **Instrument Highlights and Features**

#### Superior Analytical Performance

- Stable and precise sample mass measurement throughout the analysis cycle using an integrated balance with 0.0001 g resolution
- Precise oven temperature ramping and set point control
- Accurate flow control of oven ventilation
- Automation sequence provides uniform exposure of samples to the oven drying





#### Versatility

- Automated multi-sample analysis cycle
- Supports analysis cycle capacities of:
- 16 samples using 1.5 inch diameter aluminum foil crucibles with a nominal sample mass of 1 g
- 10 samples using 2.4 inch diameter aluminum foil crucibles with a nominal sample mass of 3 g
- Flexible method settings enable configuration of system to match standard loss-on-drying test method requirements
- Automatic drying time end point recognition using sample mass constancy option in addition to the standard fixed drying time method settings



#### **Innovative System Design**

- Rugged, hard-coat anodized aluminum oven and carousel construction supports rapid heating and cooling cycles while providing an easy-to-clean surface
- Robust and reliable motor-driven system automation mechanisms
- Integrated 10.1 inch (diagonal) color LCD touch-screen reduces instrument footprint, and promotes an ergonomic and efficient workflow
- Software provides seamless sample login and loading process with real-time graphical displays of analysis cycle data







#### Reliability with Trusted Service and Support

- Knowledgeable sales force dedicated to identifying the best instrumentation fit for your application
- Experienced technical application chemists to assist in method development and other application related requests
- Global and regional LECO service network dedicated to providing service and support offerings, including field service visits over the lifetime of the instrument

#### LECO — Your source for total analytical solutions

#### **TGA801 Thermogravimetric Analyzer**

- Determines moisture and ash or other gravimetric methods in various organic samples
- Expanded temperature control (up to 1000 °C) with variable atmospheres and ramp rates
- Automated batch thermogravimetric analysis of up to 19 samples



#### 828/928 Series Carbon/Nitrogen



828 Series



- Extended reagent lifetimes maximize instrument uptime and lowers operating costs
- Operator-centered design with touch-screen Cornerstone brand software promotes an ergonomic workspace and optimized workflow
- 828 Series features a rapid analysis cycle time of 3 minutes or less with the ability to accommodate macro samples, delivering unparalleled throughput for diverse applications
- 928 Series features a rugged design capable of analyzing macro sample masses up to 3 grams, for easy analysis of the most demanding applications requiring heterogeneous and difficult-to-prepare samples



#### **Organic Consumables**

Get the best results from your LECO instrument by using genuine LECO consumables. Visit www.leco.com for featured items, specials, and ordering information (Form number 203-828). Our global network of sales/support includes over 25 subsidiaries worldwide, and is dedicated to customer service and satisfaction. The one thing all laboratories need to be successful is results they feel confident in. Since 1936, LECO has worked with our customers to find the right solution for the type of sample analysis they are performing, helping them to achieve data that is clear, consistent, and accurate. But our commitment to the customer doesn't end when our instruments are delivered.











LECO is dedicated to enhancing the user experience long after the sale by offering thorough training on our instruments and technology, accessibility to instrument service programs that keep your instruments in top working order, and access to friendly service and support to ensure you are getting the most out of your purchase—support that will empower your laboratory for success.

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**LECO Corporation** 

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