

## 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 to the method set point and fast cooling capabilities of the oven post analysis
- 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.

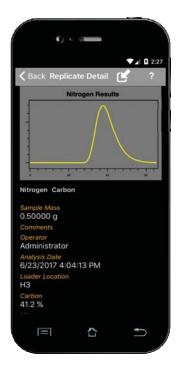
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Analysis



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 circumference aluminum foil crucibles with a nominal sample mass of 1 g
  - 10 samples using 2.4 inch circumference 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

#### TGA701 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).

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**LECO Corporation** 



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