# TGM800

# Thermogravimetric Moisture



## TGM800 - Thermogravimetric Moisture

The TGM800 is a high precision, automated thermogravimetric moisture determinator that utilises a direct method for replacing traditional loss-on-drying analytical techniques that are labour 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 maximise productivity and improve your work flow

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





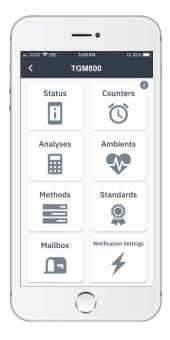
## **User-friendly CORNERSTONE® Brand Software**

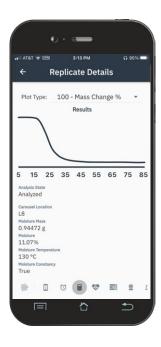
The exclusive *Cornerstone* brand software with touch-screen interface enables complete access to analysis control, method settings, diagnostics, reporting, and more in a highly organised, intuitive, and immersive environment. Designed through a collaboration of customer feedback and innovative engineering,

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





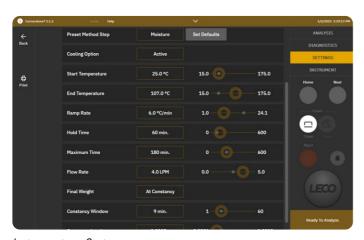
An optional Cornerstone Mobile application feature enables remote viewing of the instrument software from a smart phone, tablet, or PC. It can also be programmed to set automatic notifications from the instrument against predefined software conditions using e-mail, text message, or the Cornerstone Mobile application.

### Software Features and Benefits

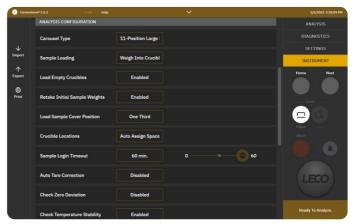
- The CORNERSTONE® software is divided into four main sections – Analysis, Diagnostics, Settings, and Instrument – for simplified navigation and organisation
- Toolbars, sliders, and drop-down menus make it easy to set parameters for calibration and data processing
- The software also includes real-time 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 also 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 aluminium foil crucibles with a nominal sample mass of 1g
  - 10 samples using 2.4 inch diameter aluminium 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



#### 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



#### **Innovative System Design**

- Rugged, hard-coat anodised aluminium 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



### LECO - Your Source for Total Analytical Solutions

#### **TGA801 Thermogravimetric Analyser**

- Determines moisture and ash or other gravimetric methods in various organic samples
- Expanded temperature control (up to 1,000°C) with variable atmospheres and ramp rates
- Automated batch thermogravimetric analysis of up to 19 samples



#### 828 / 928 Series Carbon / Nitrogen



- Extended reagent lifetimes maximise instrument uptime and lowers operating costs
- Operator-centred design with touch-screen CORNERSTONE® brand software promotes an ergonomic workspace and optimised work flow
- 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 analysing 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 eu.leco.com for featured items, specials, and ordering information (Form number 203-828).

### A Commitment to Quality and Service



Our global network of sales and support includes over 25 subsidiaries worldwide, and is dedicated to customer service and satisfaction. Our commitment to quality is further underscored with ISO-9001:2015 certification. We conform to CE quality and safety specifications, fully testing instruments at our on-site Compliance Testing Centre.

European Application and Technology Center, Berlin – Germany

### **Training Classes**



"Everyone is very knowledgeable (brilliant, if I may say!) and willing to help with any questions / problems. I am amazed at and extremely happy with the high level of service LECO provides."

LECO Customer and Class Participant

Get the most out of your LECO instrument with instrument-specific training classes offered from LECO. Typical classes feature a comprehensive overview of the theory of operation, method development, method optimisation, and proper maintenance for each instrument class. A variety of advanced features are also presented, including quantitation, user library creation, and reporting. Classes also allow for networking opportunities and the ability to learn from other users of our products. Currently available workshops and training courses are listed on our website:

eu.leco.com/events/tradeshows-conferences eu.leco.com/events/workshops

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**LECO Corporation** 

3000 Lakeview Avenue | St. Joseph, MI 49085 Phone: 269-985-5496 info@leco.com | www.leco.com **LECO Europe** eu.leco.com

