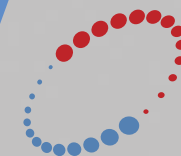




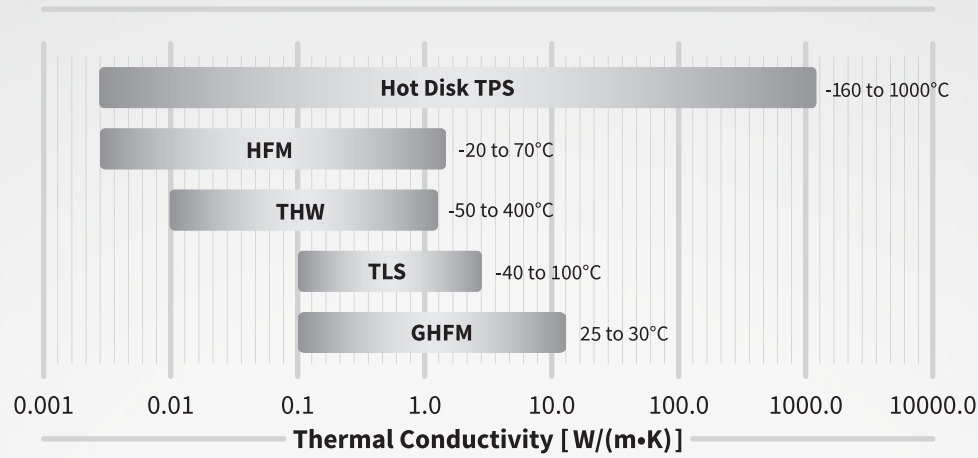
# **TGA-1000/1500**

Conforms to ISO and ASTM standards

*Thermogravimetric Analyzer for  
measurement of weight changes.*



**Thermtest**  
INSTRUMENTS



**THERMAL CONDUCTIVITY:**

- Hot Disk TPS Series** (Transient Plane Source)
- HFM-100** (Heat Flow Meter)
- THW-L1** (Transient Hot Wire)

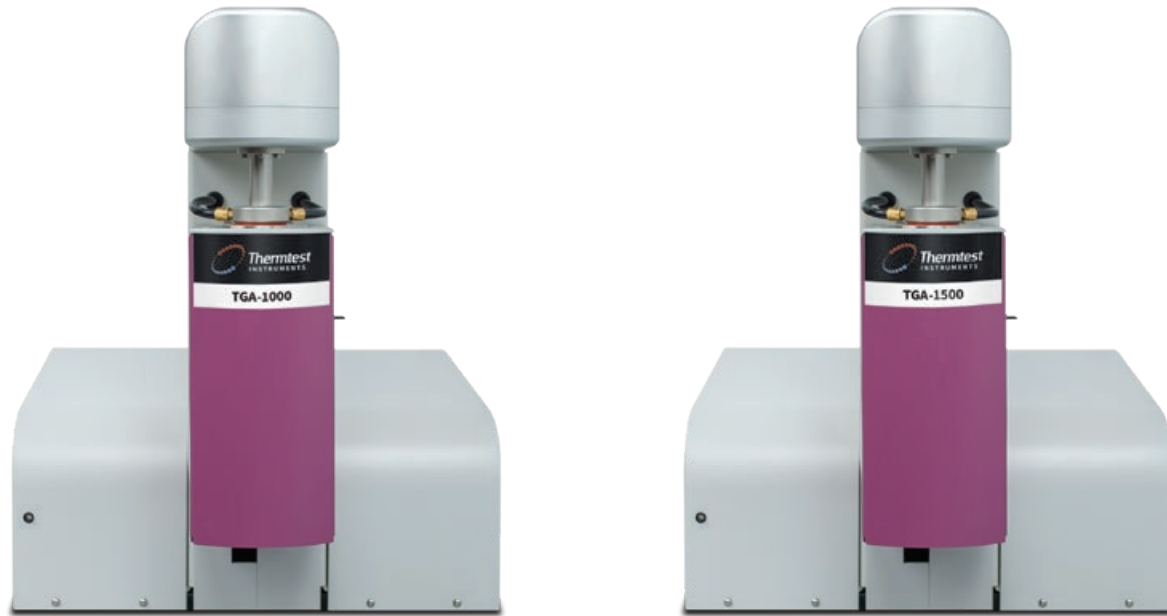
**THERMAL ANALYSIS:**

- DSC-L600** (Differential Scanning Calorimeter)
- TGA-1000** (Thermogravimetric Analyzer)
- TGA-1500** (Thermogravimetric Analyzer)



- TLS-100** (Transient Line Source)
- THW-L2** (Transient Hot Wire)
- TPS-M1** (Transient Plane Source)
- TPS-EFF** (Transient Plane Source)
- GHFM-02** (Guarded Heat Flow Meter)

A full line of high-quality Thermal Analysis instruments have been added to our suite of instruments. Thermtest has been advancing the measurement of thermal conductivity, thermal diffusivity, and specific heat for more than a decade. With more than 2000 satisfied customers worldwide, our unique combination of advanced thermal conductivity instrumentation for the laboratory, portable meters for the field, and accessories, enables us to provide ideal solutions to fit any material testing application and budget.

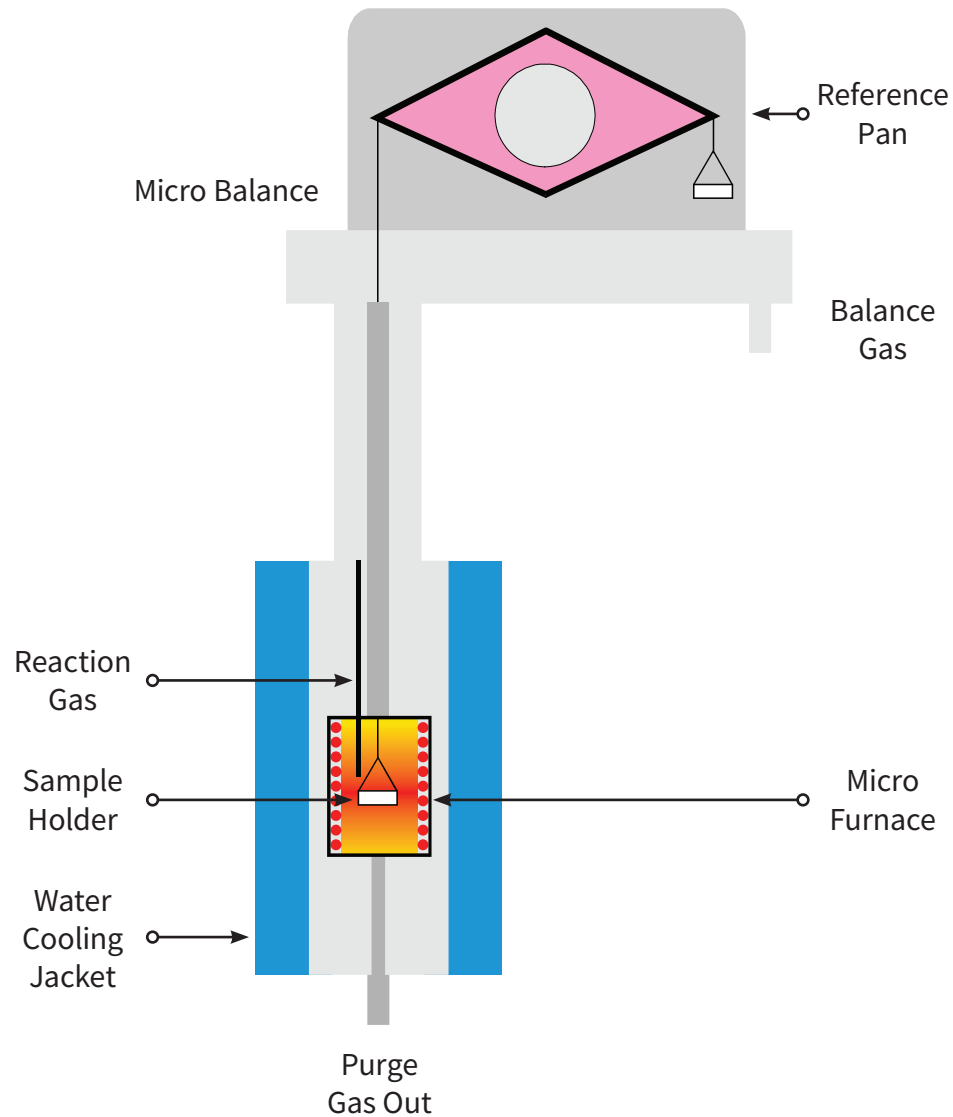


## **TGA-1000/1500** (Thermogravimetric Analyzer)

The TGA-1000/1500 (Thermogravimetric Analyzer) measures weight changes as a function of temperature or time. The system allows for multiple heating, cooling, and isothermal segments to be linked together to achieve a complex profile. Automatic gas switching is also supported during the temperature program. The vertical hangdown design offers stable and smooth weight readings to be recorded during the experiment. The TGA's small mass furnace responds quickly to changes in the temperature profile and cools down quickly for fast turn around between experiments.

Typical analyses for a TGA-1000/1500 include percent weight loss, onset temperature calculations and residual weight. The TGA utilizes the advanced and easy to use Infinity Pro Windows software. The acquisition program sets up the experiment and plots the real-time data. The Analysis program performs all calculations and provides hard copy outputs.

# TGA-1000/1500 (Thermogravimetric Analysis)



## Uses for TGA

- Thermal Stability
- Pyrolysis
- Oxidation
- Dehydration
- Decomposition
- Kinetics
- Combustion
- Moisture
- Residue or ash
- Research
- Quality Control

# THERMOGRAVIMETRIC ANALYZER CAPABILITIES

Our TGA-1000/1500 utilizes a small micro furnace with a very small swept volume. This allows for rapid heating rates and excellent atmosphere control. The dual purge system allows for quick gas switching and is plumbed in full stainless to keep Oxygen out of the system. A variety of TGA-1000/1500 pans gives the user a choice of sizes and materials to best suit the materials being tested. The proprietary micro balance is very stable and has excellent precision making for smooth high-resolution weight results. With a 24 bit Analog to Digital converter, all temperature and weight readings are ultra precise.

The TGA-1000/1500 is fully controlled by Infinity Pro Windows based software and real time plots show what is happening during the experiment. Background operation allows multiple analyzers to be run at the same time and data analysis to be performed at anytime.

TGA-1000/1500 is commonly used to determine characteristics of materials such as polymers, to determine degradation temperatures, absorbed moisture content of materials, the level of inorganic and organic components in materials, decomposition points of explosives, and solvent residues.

Both TGA units excel in performance making them a valuable tool in the lab. Both require very low maintenance and are quickly calibrated by the operator.

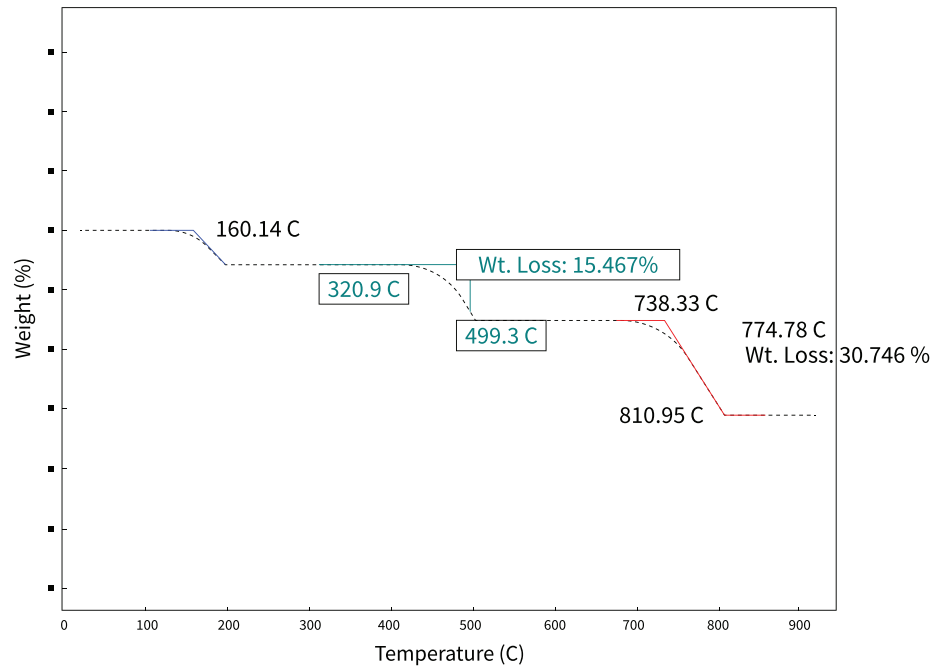
- **Simplicity of operation**
- **Ultra high resolution**
- **Dual purge system**
- **Motor driven furnace**
- **Easy sample loading**
- **Water cooled furnace**
- **Fast sample turn around**
- **Auto tare feature built in**
- **Corrosion resistant system**
- **Evolved gas analysis option**

# TGA-1000/1500 SPECIFICATIONS

	<b>TGA-1000</b>	<b>TGA-1500</b>
<b>Temperature Range</b>	Ambient to 1000°C	Ambient to 1500°C
<b>Programmed Rate</b>	0.1 - 300°C/min	0.1 - 60°C/min
<b>Temperature Segments</b>	10 Segments	10 Segments
<b>Weight Range</b>	400mg	400mg
<b>Resolutions</b>	0.1 ug	0.1 ug
<b>Thermocouple</b>	Type K	Type R
<b>Furnace Type</b>	Nichrome	Platinum Rhodium

# TGA-1000/1500 **ACCESSORIES**

## INFINITY PRO SOFTWARE

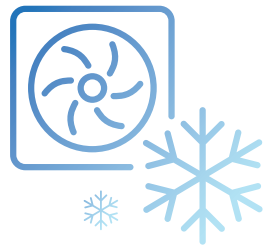


The Infinity Pro software is a powerful thermal analysis program which is flexible and easy to use. Today's thermal analyst will appreciate the tools incorporated into the software to analyze their materials.

### FEATURES

- Windows based for easy operation
- Provides a cost effective upgrade using existing thermal analyzers
- Multiple Instrument operation
- Supports DSC, TGA analysis

- Water cooling heat exchanger
- Evolved gas analysis kit









**[www.thermtest.com](http://www.thermtest.com)**

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