

Suggested ordering specification for VersaTherm HM

Thermo Fisher Scientific, Process Instruments, Newington, USA

General

The thermogravimetric analysis system is used to study the weight change behavior of chemical compounds, metals and ceramics in various gaseous environments from room temperature to 1100 °C.

Balance

A digital recording microbalance:

- Capacity of 100 grams
- Weighting range of ± 10 g with 1 μ g readability (sensitivity)
- Continuous visual digital microgram display
- Full range zeroing
- Bake-out temperature of 125 °C
- Weighing unit capable of vacuum to 5×10^{-5} torr
- Pressure relief valve
- Corrosion resistant gold anodized beam
- Heat shield
- Fan for cooling
- Preformed extension wires

Furnace

- Maximum temperature of 1100 °C
- Motorized assembly for easy sample access
- Sample view port
- Temperature repeatability to ± 3 °C
- Heating rates from 0.1 to 100 °C/min
- External furnace
- Visual display of temperature

Reaction chamber

- Patented corrosive-resistant design
- Quartz reactor tube
- Quartz baffle
- Sample size of 30 mm diameter and a height of 50 mm
- Vacuum to 5×10^{-5} torr
- Automatic, programmable gas switching and mixing of 2 reaction gases

Computer and data acquisition

- Minimum: Pentium 100 MHz personal computer with 32 MB RAM and 1 GB hard drive
- 1.44 MB 3.5" floppy drive, CD-ROM, and SVGA monitor
- 1 serial RS-232 port
- Windows NT 4.0 or Windows 2000 or greater

Software

- Continuous monitoring and display in real-time of the weight, time and temperature
- Run continuously for as long as there is free hard disk space
- Method defined heating and cooling
- Program as many ramps and isothermal segments as you wish in one run
- Switch gases and control flow rates with the optional Thermo Scientific CAHN switching accessory
- Substitution weighing
- First derivative
- Peak integration on derivative data
- Data smoothing
- Weight percent
- Residue percentage
- Addition and subtraction of one data file from another
- Scaling of data
- Click and drag zooming
- Conversion of data for export to standard spreadsheet
- Annotation on the curve
- Importing ASCII data from other programs
- Log information about the file
- GLP (Good Laboratory Practice) tracking and reporting of data modification on print-outs
- Windows NT 32 bit software
- Written in Microsoft Visual C++ using MFC (Microsoft Foundation Class)
- Designed according to Windows Graphical User Interface Guidelines
- On-line context sensitive help

- Microsoft Office style floating toolbars
- Compatible with Thermo Scientific CAHN DOS TGA data files
- Multiple data windows can be opened

**Thermo Fisher Scientific
Process Instruments**

USA

25 Nimble Hill Rd.
Newington, NH 03801
Tel. 603 436 9444
info.mc.us@thermofisher.com

www.thermo.com/cahn

C228_13.08.2007

© 2007/08 Thermo Fisher Scientific.
All rights reserved. This document is
for informational purposes only and is
subject to change without notice.