

Description

New thermal analysis systems that enter the market continue to use existing measuring technology. The advances in new systems have been in the computers, controllers and software that control and analyze the data. The TPI·PE Programmer System upgrades existing Perkin Elmer thermal analysis instruments to run with a Windows based computer system. The Windows software automates data collection, and performs all analysis functions for DSC, TGA, and TMA. This system elevates current instruments to the technological standards of today.

The TPI·PE Programmer System replaces your Perkin Elmer temperature programmer and data system with a Windows based computer system, Windows software and a Temperature Programmer Interface (TPI·PE). All experimental conditions are setup through the software.

The TPI·PE accurately controls the temperature profile of the experiment while collecting data and storing it on the computer's hard disk. Data display can be in real-time and collection can be in a background mode. Up to 10 segment temperature profiles can be linked together to perform heat, cool, isothermal and automatic gas switching operations.

Features

- Windows based system
- Utilize your existing Perkin Elmer thermal analysis modules
- Experiments run in the background to allow for foreground data analysis
- Complete temperature program control and data acquisition
- Supports DSC, TGA and TMA analysis
- Compatible with 2, 4 and 7 series modules

TPI-PE

Temperature Programmer Interface

Specifications

Requirements

- · Windows XP, 7 or 10.
- · Windows compatible printer

Supported Modules

- · DSC-2, DSC-4, DSC-7
- · TGS-2, TGA-7
- · TMS-2, TMA-7

Temperature Programmer Interface (TPI-PE)

- · Interface: RS232
- · Program voltage: 18 bits analog output to drive module
- Temperature input: Type K linearized with cold junction compensation
- · Analog inputs: 2 for Y-axis with 18 bit resolution
- · Data collection rate: .25 to 100 seconds/sample
- · Relay control for gas switching accessory

Options

- · Computer System
- · Multiple modules

Software

- · Real-time color display of data collection
- · Auto and manual scaling
- · Time vs. temperature profiles
- · First and second order derivative plots
- · Analysis save feature
- · Background, simultaneous and multiple instrument Data collection
- · On-line help manual
- · Individual segment display
- · Annotation and drawing tools
- · Copy to clipboard function
- · Post collection editing

- · Multiple curve/module overlay
- · Split screen zoom mode
- · Quadratic temperature and ordinate Correction
- · ASCII export
- · Data smoothing
- · Baseline file subtraction
- · Y-axis shift operation
- · Subfile operations
- · Custom display configuration
- · User selectable units
- · Advanced analysis packages available

DSC

Peak integration, Fused peak analysis, Onset and peak temperature determination, Glass transition analysis, Baselines lope correction, Linear or sigmoidal baseline constructs.

TGA

Weight loss in percent or initial weight, Onset calculations, Step weight loss analysis function, Residue Calculation.

TMA

Expansion coefficient calculation, Penetration calculation, Onset/Tg calculation, Elongation analysis.

Specifications subject to technical change TPI-PEv3

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