

## Pyroprobe 5000, 5150, 5200

The CDS Pyroprobe® Model 5000 is the most advanced thermal sample preparation instrument available. Platinum filaments are rapidly heated for pulse pyrolysis work, or slowly heated with controlled rates for programmed analyses. Set temperatures in 1°C increments to 1400°C for a wide heating range and more precise pyrolysis temperatures. Analytical runs may be programmed for up to eight steps per sample, with automatic control of the on-line valve, interface temperature, GC ready sensing and GC start for each step. When configured with the trapping option, the Pyroprobe® may be used to collect analytes from slow rate pyrolysis, thermal desorption or reactant gas pyrolysis. The unique interfacing design permits a direct pyrolysis path to the GC inlet or rapid sample heating and transfer to the trap without interrupting the pneumatics of the GC. Simple PC control of all parameters is presented in an easy to program window, permitting method development, storage, notation and editing.

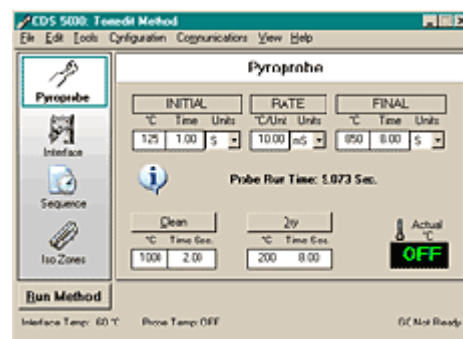
*New! For Model 5150 and 5200 Pyroprobes:*

**Cryofocusing Option**-produces sharper peaks for early eluting compounds.

An injection port mounted device cooled by N<sub>2</sub> or CO<sub>2</sub>.

### Product Features

- Platinum filament pyrolyzer for pulse pyrolysis and multistep, programmed pyrolysis
- Simplified sample loading
- Programmable interface
- Easy transfer line connection to GC
- PC control
- Three modes of operation: run, dry, clean-all user selectable
- Built-in trapping zone for thermal desorption reactant gas operation slow rate pyrolysis with trapping
- Interface directly to GC or to trap
- Specify up to eight runs per sample—automatically
- Window-based CDS 5000 DCI Control





**Model 5000**

**Injection Port Mounted**

**Pulse Pyrolysis Filament Temperature:** Programmable in 1°C increments to 1400°C

**Heating Rates:** 0.01°C/ms to 20.0°C/ms  
 0.01°C/sec to 999.9°C/sec  
 0.01°C/min to 999.9°C/min

**Clean and Dry:** User-selectable

**Steps:** Up to 8 temperature profiles with a GC start per step. Allows for multiple thermal desorption or pyrolysis steps on each sample.

**Interface (Model 1500):** Temperature programming in 1°C increments to 350°C Silco-Steel™ lined.

**Dimensions:** 23cm W x 24cm H x 31cm D



**Model 5150**

**Includes All Base Functionality Plus These Value-Added Features:**

**Pulse Pyrolysis Filament Temperature:** Programmable in 1°C increments to 1400°C

**Heating Rates:** 0.01°C/ms to 20.0°C/ms  
 0.01°C/sec to 999.9°C/sec  
 0.01°C/min to 999.9°C/min

**Interface Type:** Low-mass programmable zone

**Interface Temperature:** Settable in 1°C increments to 350°C

**Interface Heating Rates:** Programmable in 1°C/min to 100°C/min

**GC Connection:** Heated sample line through injection port

**Valve Oven:** Settable in 1°C increments to 350°C

**Transfer Line:** Settable in 1°C increments to 350°C

Connects with heated sample line for easy on and off installation. Low-mass programmable interface allows for thermal desorption of volatiles before pyrolyzing sample.



**Model 5200**

**For headspace trapping & reactant gas pyrolysis**

**Interface:** Pyrolysis to built-in trap or direct to GC

**Temperature:** Settable in 1°C increments to 350°C

**Trap Heating Rates:** 800°C/min

**Trapping Tube:** Ambient to 350°C



**Test Tube Desorber Accessory for 5200**

The 5200 may use a desorption tube instead of the Pyroprobe filament rod for heating a sample. The desorption tube attaches pneumatically to the desorption probe, which brings flow through the tube and then to the trap of the 5200.

The test-tube desorber replaces the regular interface zone so that the top of the 5200 looks like the image on the left.

Pyrolysis Feature Comparison	5000	5150	5200	5200 HPR	5250	5250T
PC Control of All Features	•	•	•	•	•	•
Pulse Pyrolysis and/or Multi-step Programming with Auto GC Start	•	•	•	•	•	•
Silcosteel Interface	•	•	•	•	•	•
Pulse Pyrolysis Programmable in 1° Increments to 1400°C	•	•	•	•	1300°C max	1300°C max
Programmed Pyrolysis Heating Rates: 0.01°C/ms to 20°C/ms 0.01°C/sec to 999.9°C/sec 0.01°C/min to 999.9°C/min	•	•	•	•	•	•
Easily Removable Transfer Line to Inlet of GC		•	•	•	•	•
Injection Port Mounted System	•				•	
Temperature Programmable Interface Settable in 1°C Increments to 350°C; Programmable at 1°C/min. Increments to 100°C/min.		•	•	•	•	•
Reactant Gas Option (Py-trapping)			•	•		•
Second Heated Zone for Sorbent Trap (Py-trapping)			•	•		•
Thermal Desorption of Solid and Liquid Samples		•	•	•	•	•
Thermal Desorption of Sorbent Tubes – VOC in Air			•	•		•
Evolved Gas Analysis (EGA)	•	•	•	•	•	•
Thermal Cutting		Need Cryofocuser	•	•	Need Cryofocuser	•
High Pressure (500psi Max; 3400kPa) Reactant Gas Option (5200 – HP)				•		
Catalyst Reactor (up to 800°C)				•		
Autosampler Capability – 36 Samples					•	•
<b>Optional</b> Test Tube Desorber – Dynamic Headspace			•			
<b>Optional</b> Polymer, Additives & Biofuel Libraries	•	•	•	•	•	•
<b>Optional</b> Cryofocusing (liquid N <sub>2</sub> )		•	•	•	•	•
<b>Optional</b> Cryotrapping (liquid N <sub>2</sub> )			•	•		•