

# Specification

## EZ Flash II Specification

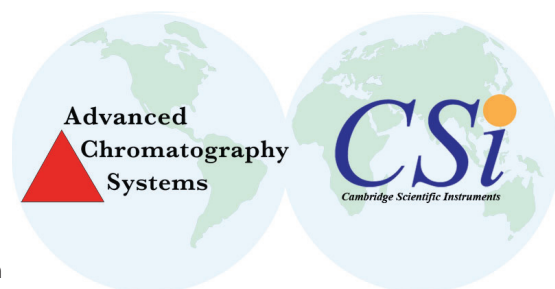
	Specification	Benefit
<b>Column Heating</b>		
Ramp Rate	Up to 1200°C per minute	Productivity
Temp Range - 5m column	Ambient - 365°C	Complete analysis
Temp Range - 10m column	Ambient - 280°C	Complete analysis
<b>Cool Down Time</b>	In seconds	Fast cycle times/productivity
<b>EZ Flash Columns</b>	5m using conventional Fused Silica Open Tubular (FSOT) material, from 0.53 to 0.10mm ID, fits in GC oven. 10m using conventional Fused Silica Open Tubular (FSOT) material, from 0.32 to 0.10mm ID, fits in GC oven.	Versatility
Net Weight	approx 32 lbs (14.5kg)	Sturdy
Environmental Operating	Ambient to 40°C	Standard lab environment
<b>Interface Heating</b>		
Injector Interface Range	Ambient - 380°C	Complete analysis
Detector Interface Range	Ambient - 380°C	Complete analysis
Dimensions (H x W x D)	15 x 7 x 15 inches (38 x 18 x 38cm) (control Module)	Saves bench space
Method Storage	Up to 5 methods with unlimited number of steps	Flexibility
Communication to GC	Electronic handshake for Ready/Start	Easy Operation
Agency Approvals	CE, FCC, TUV	Worldwide acceptance
Power	110/220 VAC, 50/60Hz, 20/10 amps Autoswitching	Worldwide acceptance

## EZ Flash II Fast GC Accessory

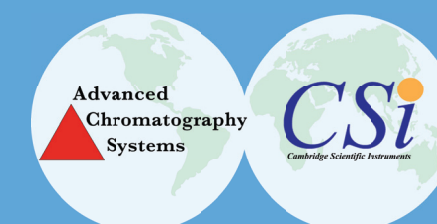


Get 10 -20 times more productivity from your existing GC. Operation is simple, and EZ Flash is fully compatible with most GC models plus a wide range of applications.

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# Technology

The **EZ Flash II fast GC accessory allows your GC to be upgraded to a fast GC**. This upgrade uses most of the GC's current components such as the injector, detector, and data system. It simply speeds up the chromatographic separation to fast pin-point chromatography. This allows continuity of data and lab processes while reducing time and costs - resulting in painless integration and very rapid investment returns.

The EZ Flash II unit controls the analytical column temperature through a patented resistive heating technique. Modern capillary column technology allows very rapid heating and cooling, which permits the column to be heated at rates up to 1200°C per minute. A standard GC capillary is placed inside a thin walled metal tube. The tube is then electrically heated and its resistance measured every 10 milliseconds to achieve accurate column temperature control along the whole capillary length.

In a traditional Gas Chromatograph, analytes migrate through the column for the whole analysis duration. Capillary systems often use a cool oven start temperature to ensure that low boiling components can be sufficiently retained to achieve separation from the solvent front and other components.

High boiling components require a higher over temperature to ensure correct and timely elution.

The clear drawback of traditional GC is that most of the GC time is spent in starting at a low temperature, and then heating up the oven to facilitate correct elution of high boiling components. This is followed by cooling down the oven to start the next run and correctly elute the low boiling components. The elongated elution times in these capillary runs allow peak diffusion to occur which compromises column resolution.

The EZ Flash Column can begin at low temperatures ensuring that low boiling components are separated and then ramp rapidly (**up to 1200°C per minute**) to achieve complete separation in a fraction of the time taken by a normal GC. In addition, only a small amount of heat is released into the GC oven during analysis, making EZ Flash column cool down almost instantaneous.

Compared to a conventional GC, peak widths achieved using EZ Flash are greatly reduced due to the rapid elution of the components. The maintenance of peak resolution provides increased signal to noise ratios leading to better detection limits.



# Features & Benefits

Now Your Existing GC can run 10-20 times faster - with the EZ Flash II Fast GC Accessory. Quick and simple to install, EZ Flash is a "plug-and-play" solution that heats columns at up to 1200°C per minute, enabling you to run analyses at unprecedented speeds.

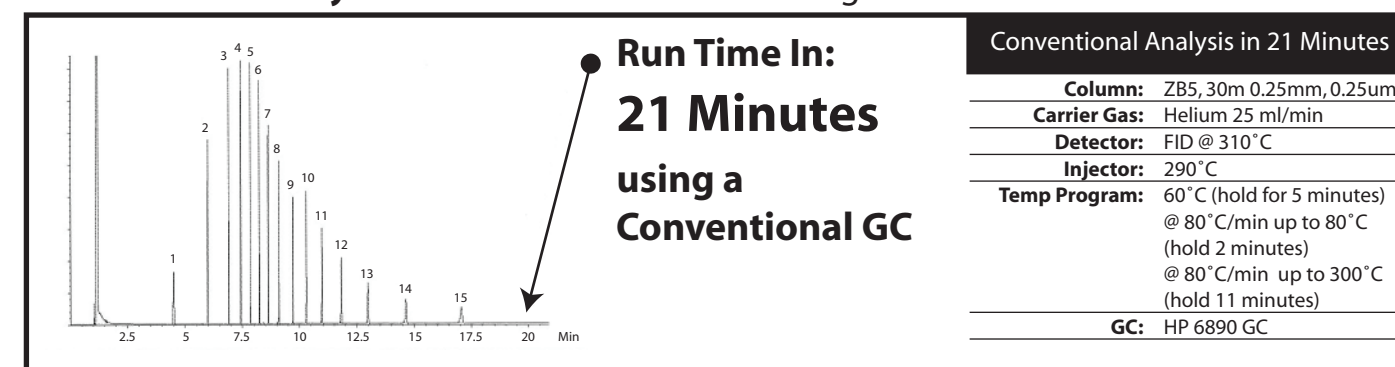
Feature	Benefit
Temperature ramps up to 1200°C/min	Fast analysis / increased productivity
Cool down rates in seconds	Short cycle times / increased productivity
Simple user operation	Reduced Operator error
Range of interface kits	Multifaceted compatibility
Re-designed interface	Improved reliability
- Uses standard ferrules	Leak free column connections
- Direct electrical contact	Reproducibility

## Sample Analysis

### Extractable Total Petroleum Hydrocarbon (ETPH) ENVIRO - 131

ETPH standard mix is used in methods for contamination of water and soil. Conventional analysis can take 20 minutes or more, with EZ Flash II analysis is done in less than 6 minutes

#### Conventional Analysis: Run time in 21 minutes using a conventional GC



#### EZ Flash II Analysis: Run time in 5 minutes 40 seconds using the EZ Flash II

