



Heated Filter Module

PRODUCT FEATURES / BENEFITS

- ◆ User Friendly Design
- ◆ Rugged Construction
- ◆ Choice of K-Type or J-Type Thermocouple
- ◆ Accepts Industry Standard Filter Cartridges
- ◆ Quick Release Bayonet-Type Closure
- ◆ 450°F Maximum Temperature (232°C)
- ◆ Automotive Emission Testing
- ◆ Continuous Emissions Monitoring
- ◆ Stack Gas Testing

UFS Heated Filter Assemblies are designed specifically for engine testing, continuous emissions monitoring (CEMS), and stack gas sampling.

Our simple, field-friendly design incorporates a form-fitted silicone heating jacket that eliminates cold spots and provides fast, uniform heat transfer. If maintenance is ever required, the heating jacket can be easily replaced in the field.

Product Highlights

- Three standard sizes available to handle a wide range of flow requirements
- Compatible with industry-standard filter cartridges to minimize inventory
- Choice of J-Type or K-Type thermocouples
- Optional dual thermocouples for redundancy in case of failure
- ¼-turn bayonet handle for quick, safe filter cartridge replacement—even at operating temperature

The entire unit is housed in a durable high-temperature thermoplastic enclosure rated up to 450°F, which can be mounted in either **vertical or horizontal orientations**.



J-TYPE Thermocouple	HFM-H130STR-HJ	HFM-H140STR-HJ	HFM-H254STR-HJ
K-TYPE Thermocouple	HFM-H130STR-HK	HFM-H140STR-HK	HFM-H254STR-HK
Port Connection	SS Tube Fitting for 3/8" Tube	SS Tube Fitting for 3/8" Tube	SS Tube Fitting for 1/2" Tube
Maximum Pressure (psig)	30	30	30
Maximum Temperature (°F)	450	450	450
Internal Volume (cc)	85	235	1030
Weight of Housing (lbs)	9.0	13.0	24.0
Principle Dimensions: (inches)			
Diameter of Heat Module	4.75	4.75	6.63
Overall Length w/ Handle	11.50	16.00	19.00
Overall Length without Handle	8.50	13.00	16.00
Base Plate Dimensions	6.00 Square	6.00 Square	8.00 Square
Element Removal Clearance	5.34	9.58	12.72
Filter Element Codes:			
Particulate Element (Standard)	25-64-□S	25-178-□S	51-254-□S
*Other Elements Available- View Drawing			
Volts	120	120	120
Amps	1.5	1.5	1.5
Watts	180	180	180
Frequency	50/60 Hz	50/60 Hz	50/60 Hz

Tube Stubs Supplied per Customer Specifications

Heated Module Controller

For a complete turnkey solution, we offer a digital temperature controller package designed for precision and reliability.

- Accuracy: Maintains temperature within $\pm 1\%$ of the set point.
- Smart Cycling: Once the set point is reached, the controller shuts off and will not restart until the temperature falls by 5°F, preventing unnecessary cycling.
- Safety Alarm: An audible alarm activates if the temperature rises more than 15°F above the set point, ensuring safe operation.

This option allows us to deliver a fully integrated, ready-to-use system tailored to your application.

Two Models Available:

Model #HFM-Controller-SDC-J
Model #HFM-Controller-SDC-K



Product Highlights:

- Affordable and Compact
- Compatible with a wide range of heaters and applications
- Easy-to-use programmable digital controller, self-contained, plug and play design
- Includes thermocouple and power output cords

Specifications:

- Small Unit Size:
 - 5.5 in L x 4.25 in W x 1.75 in H
 - 140mm L x 108mm W x 45mm H
- On-Off control
- Temperature Control Range: 32-999°F (°F models) or 0-700°C (°C models)
 - Accuracy: +/- 1% FS
- Includes J-type or K-type thermocouple sensor
 - 5-foot (1.5 m) factory installed
- 120 VAC or 240VAC power input
- Relay output rated for 10A @ 240VAC
- Sensor break options
- Upper and lower limits of the setpoint can be adjusted
- Set-point value can be adjusted by using a single key
- Hysteresis adjustable between 1 and 99°F/°C
- Exposure Temperature: 32-158°F (0-70°C)
 - 80% humidity non-condensing
- 5-foot (1.5 m) input power cord
 - 120VAC unit = NEMA 5-15 plug
 - 240VAC unit = NEMA 6-15 plug
- 5-foot (1.5 m) output power cord
 - 120VAC unit = NEMA 5-15R receptacle
 - 240VAC unit = NEMA 6-15R receptacle
- Internal buzzer for alarm condition / error

Ordering information

To discuss your application requirements and place your order please contact us at **1-800-311-5561**.

We maintain inventory on an **extensive range of components**, allowing us to build your heated module to order – please allow a minimum of three weeks ARO. For expedited service please consult us directly.

When ordering, please specify your **fitting/connection requirements** to ensure proper configuration.

As part of our quality assurance, each module is **tested for 24 hours prior to shipment** to guarantee reliable performance.