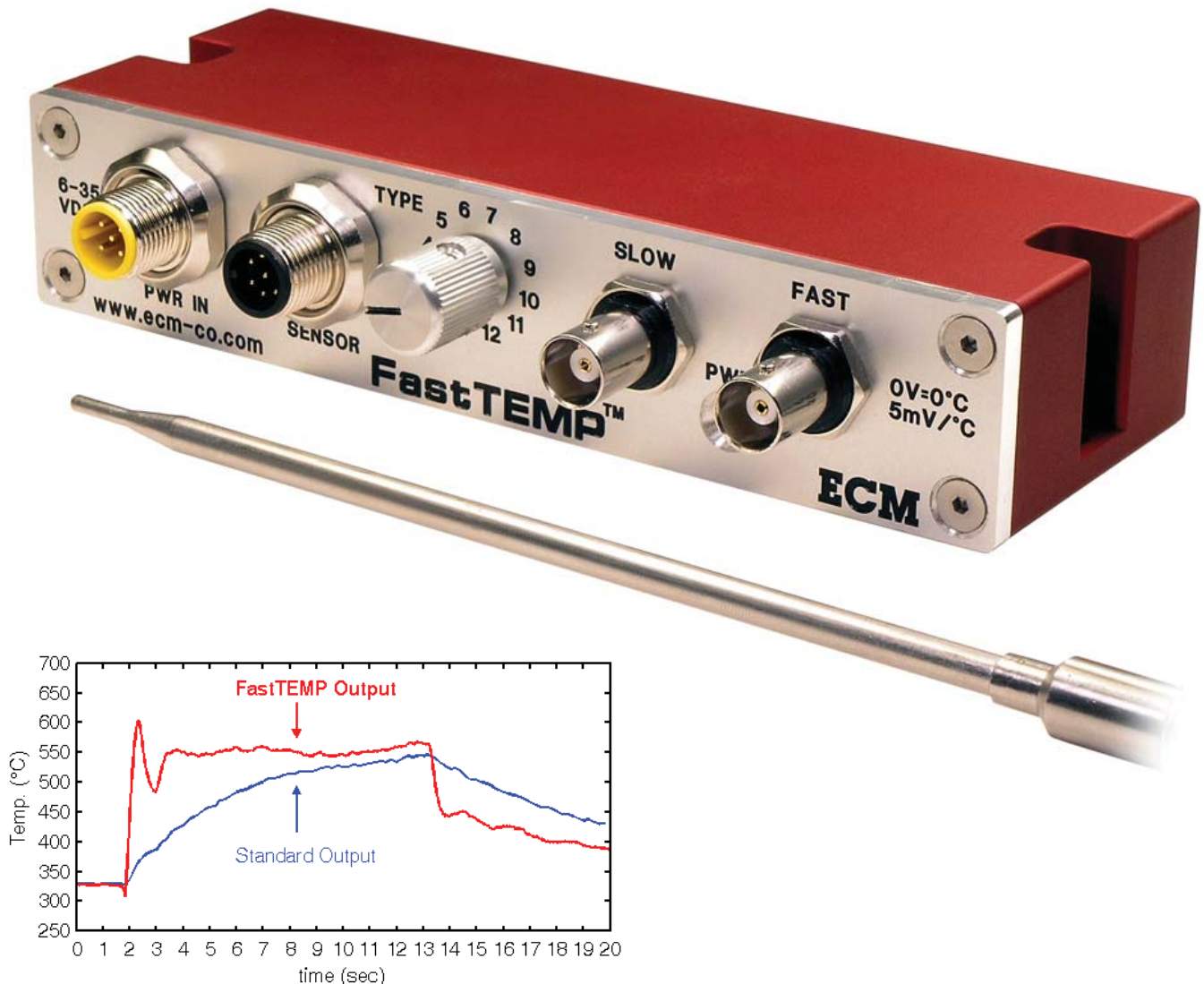


ECM FastTemp™ Fast Response Thermocouple Module



- Fast Response (less than 50 msec)
- Uses Standard K-Type Thermocouples
- -60 to 1370 °C Measurement Range
- Internal Cold Junction Compensation
- Fast and Standard Speed Outputs
- Driven Voltage Outputs
- Wide Supply Voltage Range
- Environmentally Sealed

ECM's FastTemp thermocouple module outputs ultra-high bandwidth temperature measurements using standard K-Type (Chromel Alumel), grounded thermocouple probes. Measurements that once required a 0.005" (0.13mm) diameter exposed-bead thermocouple can now be performed using a 1/16" (1.5mm) shielded (i.e. more rugged) thermocouple. The speed increase is made possible by ECM's proprietary active-drive thermocouple circuitry. With FastTemp, fast dynamic temperature information hidden by conventional thermocouple amplifiers now becomes available for use. FastTemp is especially suited for temperature measurements in the exhaust of engines.

Specifications

Range	-60 to 1370°C (-76 to 2498°F)	
Accuracy	± 1°C RTI (relative to input) ± 10mV RTO (relative to output)	
Response Time	Fast	Less than 50 msec (10 to 90%)
	Standard	Dependant on probe used
Outputs	5mV/°C for Fast and Standard signals Less than 500Ω output impedance 200V Isolation from sensor input to outputs 2 Female BNC connectors	
Sensor	Supplied	1/16" (1.5mm) dia., 6" (150mm) grounded K-Type
	Optional	Any grounded K-Type Internal cold junction compensation
Cable	Sensor	2m
	Power	2m
Power	6 to 35 VDC, 200mW typical 500V galvanic isolation from sensor input and outputs LED power status indicator	
Mounting	Two 1/5" (5mm) holes from top, Two 10-32 (M5 x 0.8) threaded holes on back	
Size & Weight	152mm x 70mm x 30mm (6" x 2.75" x 1.2"), 360gm (12.7oz)	
Environmental	IP67, -55 to +125°C, 100% humidity, environmentally sealed	

Ordering Information

FastTemp	FastTemp Kit (includes parts FT-01, FT-02, FT-03, FT-04, FT-05. See below.)
FT-01	FastTemp module
FT-02	Spare 2m power cable (use with P/N FT-03)
FT-03	Spare power cable banana plug adapter
FT-04	Spare 2m thermocouple sensor cable
FT-05	Spare 1/16" (1.5mm) diameter, 6" (150mm) long, grounded K-Type thermocouple probe
04-01	Optional AC/DC Supply, supports multiple units

ECM ENGINE CONTROL
AND MONITORING

Los Altos, CA 94023-0040 • USA • Tel: (408) 734-3433 • Fax: (408) 734-3432 • www.ecm-co.com

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