

Advanced Test Equipment Corp. www.atecorp.com 800-404-ATEC (2832)

The Model T640 PM Mass Monitor



Teledyne API is excited to unveil the latest addition to our ambient particulate monitoring product portfolio: The Model T640 PM mass monitor. Delivering continuous, real-time PM mass measurements using innovative broadband spectroscopy, the T640 comes with high resolution, fast response, low power, and effortless operation.

— With NumaView[™] premium T Series software —

- Large, vivid, and durable color touchscreen display
- Ethernet with TCP/IP Modbus communications and Remote control software
- Lifetime technical support by phone and email
- Standard two-year warranty
- US EPA-approved





T640 Specifications

Performance	 Measurement Principle 	Broadband spectroscopy using 90° white-light scattering with Polychromatic LED
	 Particle size resolution 	256 sizes over 0.18 – 20µm range, combined to 64 channels for mass calculation
	PM Mass Measurements	PM_{10} , $PM_{2.5}$, and $PM_{10-2.5}$ simultaneously
	PM Mass Resolution Measurement Range	0.1 - 10,000 μg/m ³
	Mass Measurement & Display Resolution	0.1 µg/m³
	Precision	±0.5 ug/m³ (1-hr average)
	 Lower Detectable Limit 	<0.1 ug/m³ (1-hr average)
	 Data Rate 	10s to 48hr (user selectable)
	 Mass Concentration Accuracy 	Exceeds US EPA PM10 FEM and Class III FEM PM2.5 performance requirements for additive and multiplicative bias compared to FRM samplers
	 Flow Rate 	5.0-lpm sample flow (Standard model); 11.67-lpm optional bypass flow (with option 640x)
	Flow Accuracy	Within $\pm 1\%$; (Typically within $\pm 0.5\%$)
Operating Conditions	 Operating Temperature 	0 - 50°C, non-condensing
	Ambient Temperature	-40 - 60°C
	 Ambient Relative Humidity 	0 - 100%
	 Sample Humidity Control 	24VDC, 90W (max) heater controlled to 35% RH
	 Weatherproof enclosure required with 0 - 50°C, non-condensing environmental control 	
	 Requires only 10-min warm-up time 	
Interfaces and Data Storage	■ T Series analyzer interface with full touch screen display and NumaView [™] premium operating software and NumaView [™] remote software	
	 4Gb memory allows for > 1 year of internal data storage 	
	Front Panel USB Ports	2x type-A Peripheral Ports
	 Ethernet Communication (supports TCP/IP Modbus and HTTP polling protocols) 	
Electrical	 T640 instrument 	100 - 230VAC 50/60Hz, Power consumption < 120W @ 120VAC
	 External pump (for optional bypass flow - option 640x) 	100 - 120VAC 60Hz or 220-240VAC 50/60Hz, Power consumption <360W @ 120VAC
Physical Specifications	 Unit dimensions (HxWxD) 	7" x 17" x 14" (17.8 x 43.2 x 35.6 cm)
	 Unit weight 	19 lbs (8.6 kg)
	 Sample heater tube height 	43″ (109 cm)
	 Sample heater tube weight 	6 lbs (2.7 kg)
Certifications	 US EPA PM_{2.5} Federal Equivalent Method EQPM-0516-236 US EPA PM_{2.5} Federal Equivalent Method EQPM-0516-238* US EPA PM₁₀ Federal Equivalent Method EQPM-0516-239* US EPA PM_{10-2.5} Federal Equivalent Method EQPM-0516-240* 	

* with 640x option

Specifications subject to change without notice.



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