

Partisol 2025i-D Dichotomous Sequential Air Sampler

Federal Equivalent Method ambient sampler featuring simultaneous collection of fine and coarse particles.

The Thermo Scientific™ Partisol™ 2025i-D Dichotomous Sequential Air Sampler simultaneously collects high quality samples of fine and coarse ambient particulate matter (PM). Developed on the renowned iSeries software platform design, this sampler also features USB ports for improved data downloads.

Features

- U.S. EPA PM-10 Coarse and PM-2.5 Equivalent Sampler
- Enhanced user interface and iSeries communication capabilities
- Improved data downloads
- Collection of fine and coarse fractions of PM-10 on two separate 47mm filters
- Sequential sampling system with 16 filter capacity



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Introduction

The Partisol 2025i-D sampler combines sequential filter exchange capabilities with dichotomous splitting technology to provide an automated split sample stream that offers long term unattended operation.

The sampler utilizes a virtual impactor to separate an incoming PM-10 air stream into its fine (PM-2.5) and coarse (PM-10 minus PM-2.5) components. The two sample streams are collected concurrently on two 47mm filters housed in FRM-style molded filter cassettes. Then, the sampler exchanges each set of two filters according to a user-specific sampling time, for example, a midnight-to-midnight sampler exchanged daily.

The iSeries communication capabilities of the Partisol 2025i sampler offers easier connectivity through an enhanced user interface.

Additional iSeries features include:

- Flash memory for increased data storage
- Enhanced Ethernet connectivity
- Remote data access
- iPort communication software
- Large interface screen
- USB numeric keypad

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Specifications	
Filter holders and media	Accommodates 47mm filter in the single-flow and dual-flow configurations For U.S. EPA PM-2.5 and PM-Coarse sampling: Teflon™ 2µm pore size membrane filter (regulation required) For U.S. EPA PM-10 reference sampling: Pallflex TX-40, quartz filter and Teflon® materials Optional cassette separators may be used to eliminate passive volatilization losses or cross-contamination for speciation work
Sample flow control and reporting	Activol flow control system using mass flow controller. Controls primary (PM-2.5) sample flow at 15 l/min and secondary (PM-Coarse) sample flow at 1.67 l/min. The sampler displays the current volumetric flow rate (l/min.).
Audit/calibration	Direct software support for single-point and multi-point audit/calibrations of the volumetric flow
Internal data storage	86 days of Interval data (stored every 5 minutes), 32 filter data records, and input data (30 minute default)
Data input and output	Keypad/display for data retrieval and user programming, RS232/RS485 interface, Wind vane/anemometer connection with 24 Vdc power output and 2 0-5 Vdc inputs for wind speed and direction Dual USB ports for easy data download to universal flash drives Optional kit available to configure the sampler for digital and analog I/O to enable connection to other devices
Operational temperature	-40°F to 122°F (-40°C to 50°C)
Power requirements	3A @ 120 VAC, 1.5A @ 240 VAC
Physical dimensions	25.2" (64 cm) W × 15.8" (40.2 cm) D × 26.3" (67.3cm) H (enclosure) Top cover: H = 31" (78.8 cm), Inlet connector: W = 35.3" (89.5 cm) Stand: (Top section) 30.8" (78.2 cm) W × 27.1" (68.8 cm) H × 14" (35.6 cm) D Footprint: 42" (106.7cm) W × 18.1" (46 cm) D
Weight	101 lbs (46kg)
Safety and electrical designations	CE: EN550011 Group 1, Class B (Emissions); EN55082-1 (Immunity); EN61010-1 (Safety) ETL: UL and CSA Equivalent approval
Regulatory designations	Regulatory Designations include US EPA PM-10 Equivalence Method: EQPS-0311-198 US EPA PM-2.5 Equivalence Method: EQPS-0509-179 US EPA PM-Coarse Equivalence Method: EQPS-0509-180

Ordering information

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Choose from the following configurations/options to customize your own Partisol 2025i-D Sampler

1. Voltage options

A = PM-10, 120 VAC 50/60 Hz

B = PM-10, 220 VAC 50/ 60 Hz

2. Inlet options

E = PM-10 U.S. EPA

T = PM-10 traditional

V = VSCC inlet combo PM-10 U.S. EPA 1st stage w/ PM-2.5C VSCC

W = VSCC inlet combo PM-10 traditional stage w PM-2.5C VSCC

P = TE inlet combo PM-10 US EPA 1st stage w/TE 2.5C US EPA

Q = TE inlet combo PM-10 traditional 1st stage w/TE 2.5C US EPA

X* = Thermo Fisher Scientific inlet combo PM-10 US EPA 1st stage w/PM-2.5 TF

Y* = Thermo Fisher inlet combo PM-10 traditional 1st Stage w/PM-2.5 TF

Note: X* and Y* are not US EPA approved and hence recommended for research use only

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Your order code: 2025i-D



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