

SEQUENTIAL AIR SAMPLER

PARTISOL-PLUS 2025

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The standard Thermo Partisol Plus sequential dust sampler has been modified to meet the exact requirements of the prEN 15449 standard without generative constraints of use or installation. This standard describes the airborne dust sampling method to determine the mass concentration of Benzo [a] pyrene in ambient air.

The standard Thermo Partisol Plus sequential dust sampler is generally used for the collection of PM-10 or PM-2.5 fractions, to measure the airborne dust mass concentrations or heavy metal concentrations. An internal filter sequencer can expose automatically up to 16 filters of a 47 mm diameter at a flow rate of 1 m³/min. The main feature of the Partisol Plus 2025i BaP is a Peltier cooler maintaining exposed filters at a temperature lower than 20°C.



APPLICATIONS

- Air quality monitoring networks, including background sites
- Routine input for air quality index
- In and around industrial and material handling facilities
- Remediation projects (Superfund, hazardous waste)



BENEFITS

- ⊕ Sequential sampling with a 16-filter capacity provides two weeks of unattended daily sampling
- ⊕ (Standard 47mm filter cassettes with convenient filter change mechanism)
- ⊕ Automated sample filter exchange by a user-defined time interval or other condition
- ⊕ Easy configuration for PM-10, PM-2.5 or PM-1
- ⊕ Design for installation at an outdoor sampling location without additional protection
- ⊕ ActiVol automatic flow control
- ⊕ RPCOMM software for local and remote interaction

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SPECIFICATIONS

FLOW RATE	Unit can control at rates ranging from 5 to 18 lpm
TEMPERATURE OPERATING	-30° to +50°C
APPROVALS AND CERTIFICATIONS	<ul style="list-style-type: none"> - PM-2.5: USEPA Reference Method RFPS-0498-118. - PM-10: USEPA Reference Method RFPS-1298-127. EN12341: Equivalent PM-10 manual sampling method for European Norm EN1241. - Meets: CE EN550011 Group 1, Class B (Emissions), EN55082-1 (immunity), EN61010-1 (Safety); ETL UL- and CSA-equivalent approval
INPUT/OUTPUT	<ul style="list-style-type: none"> - Keypad/display for data retrieval and user programming - RS-232 interface for data retrieval and remote operation - Supports advanced bi-directional AK Protocol 3 user-defined Analog outputs (0 to 5VDC) for data logging - 2 user-defined TTL alarm outputs - Wind vane/anemometer correction with 24VDC power output and two 0 to 5VDC inputs for wind speed and direction - 3 averaged Analog inputs (0 to 5VDC) with conversion to engineering units (in addition to wind speed and direction above) - RS-485 interface for connection with other Thermo Scientific devices Automatic calibration of Analog inputs and output channels
POWER	<ul style="list-style-type: none"> - Voltage: 120/240V - Power Consumption: 3/1.5A
WEIGHT	46kg
DATA MEMORY	16 days of interval data (stored every 5 minutes), 32 days of input data (stored every 30 minutes, default), and 50 filter records

