

Portable EMC System

Environment Monitoring & Control System for Portable Devices

CAPABILITIES & FEATURES

Device Integration: Seamlessly connects to portable devices, enabling unified device information and configuration.

Simplified Setup: Configure sampling schemes across multiple devices simultaneously, significantly reducing operational time and increasing workflow efficiency.

Centralized Data Management: Synchronize, view, and retrieve data and audit trail records from portable devices. Features built-in analytics and one-click export of detailed reports (PDF/Excel) for compliance.

Data integrity: Compliant with data integrity requirements, such as 21 CFR Part-11, featuring multi-level access privileges and audit trail.

User-Friendly Design: Combines an intuitive, clean interface with straightforward operation and customizable settings.

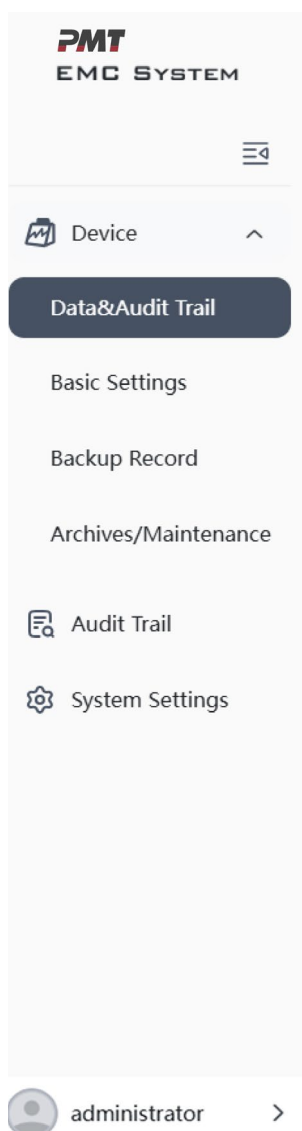
Support & Services: Backed by comprehensive after-sales support and ongoing upgrade services.

INTRODUCTION

The Environmental Monitoring & Control (EMC) System is a powerful, browser-hosted, and locally installed software platform. It supports flexible deployment of both portable and remote devices to enable integrated management of equipment, facilities, tasks, and real-time data.

The EMC software for portable devices is primarily used in conjunction with portable airborne particle counters, such as the mini APC, supporting data synchronization and statistical analysis to monitor air particle levels in clean areas. It can also connect portable bioaerosol samplers to back up data and audit trail records and manage device information.

The EMC system is divided into four main functional modules: Device, Audit Trail, System Settings, and Personal Center.



Device: Manage portable devices: add devices, import data, view data and audit trails, and maintain backup records and files.

Data & Audit Trail: Synchronize and view data and audit trail records from portable devices.

Basic Settings: Configure device settings such as sampling schemes, data schemes, display options, time settings, prompts, accounts, device information, and communication parameters.

Backup Record: Back up the data stored within portable devices or software systems.

Archives/Maintenance: Add devices and maintain, delete, or export the added devices.

Audit Trail: Automatically record operations performed in the system (who did it, when, and from which P address). Audit trail records cannot be deleted or modified.

System Settings: Contains three modules: Accounts, Permissions, and Policy.

Personal Center: includes Personal information, Language, Change Password, and Log Out options.

CORE FUNCTIONS

Data & Audit Trail:

Synchronizes sampling data and audit trail records from multiple devices simultaneously, with one-click export for standard reports and data details.

Device

Batch Select

mini APC

A2100017

1314

APC

A1200121

Monitoring Data

Audit Trail

Sync

General View

Data SCM All Data

Filter

Generate Chart

Export

No.	Devices	Start Time	Group	Zone	Recipe	Program	User	Result	Operation
☐ 11	A2100017	2024-09-11 16:54:38	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 12	A2100017	2024-09-11 16:51:08	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 13	A2100017	2024-09-11 16:47:38	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 14	A2100017	2024-09-11 16:44:08	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 15	A2100017	2024-09-11 16:40:38	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 16	A2100017	2024-09-11 16:37:08	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 17	A2100017	2024-09-11 16:33:38	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 18	A2100017	2024-09-11 16:30:08	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 19	A2100017	2024-09-11 16:26:38	N/A	F	Fed	Standard	Admin	Normal	Details
☐ 20	A2100017	2024-09-11 16:23:08	N/A	F	Fed	Standard	Admin	Normal	Details

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☐ Select All Table

Total 2535

1 2 3 4 5 6 ... 254

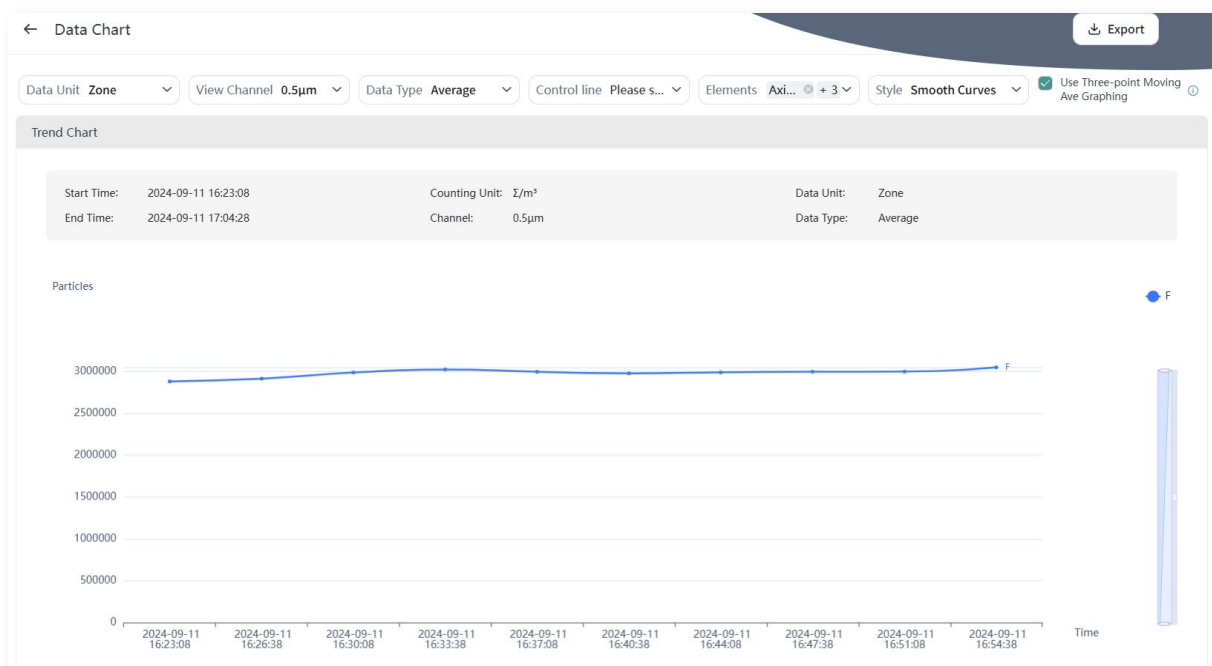
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Note: The Data & Audit Trail module is only applicable to portable APC and mini APC devices.

Data Analysis:

Performs statistical and trend analysis of airborne particle sampling data for contamination risk monitoring.



Basic Settings:

Allows centralized configuration of sampling plans, data plans, and other core settings, with support for importing and exporting configurations between the system, connected devices, and the template library.

Sampling Plan

Data Plan

Display

Time

Info Alert

Account

Device Information

Communication

Zone

Recipe

Threshold

Group

+ Add

Filter

View

No.	Recipe Name	Type	Mode	Flow Rate	Status	Parameters	Associated Map	Options
☐ 1	9	Monitoring	Auto	50LPM	Operational	Expand	View	Details/Edit Delete
☐ 2	Default	Classification	Auto	50LPM	Operational	Fold	-	Details/Edit

Regulation Setting Standards

Level

Airflow

Status

Largest selected size

EU GMP Annex 1 2008-ISO:2015	A	Unidirectional	Operational	5.0
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Location

Description

Volume

Duration

times

Delay

Location01	-	50.0000L	000:01:00	2	00:00:02
Location02	-	50.0000L	000:01:00	2	00:00:02
Location03	-	50.0000L	000:01:00	2	00:00:02
Location04	-	50.0000L	000:01:00	2	00:00:02

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Total 3

1

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Note: The Basic Settings module is only applicable to portable mini APC devices.

Backup Records:

Supports convenient, on-demand backup and recovery for device sampling data and audit trail records.

Airborne Particle Counter

BioAerosol Sampler

Import Backup

Device

Monitoring Data

Audit Trail

Backup Record

Filter

View

BAS

C1100076

NQWDGgllkppprHK

No.	Backup Time	Backup Location	Backup File or Path	Options
☐ 1	2025-11-28 10:48:33	This system	Data_C1100076_20251127161733.db	Download Delete
☐ 2	2025-11-28 10:47:58	This system	Audit_C1100076_20251127161814.db	Download Delete
☐ 3	2025-11-28 10:47:29	This system	Data_C1100076_20251128094242.db	Download Delete

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Total 3

1

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Archives/Maintenance:

Enables centralized management and maintenance of portable device information.

Airborne Particle Counter
BioAerosol Sampler
BioAerosol Monitoring System

Serial Number	Name	Type
A2100017	mini APC	mini APC
A2100519	mini APC	mini APC
A1200121	APC	APC
A2100407	mini APC	mini APC
A2300039	mini APC	mini APC
A2400002	mini APC	mini APC

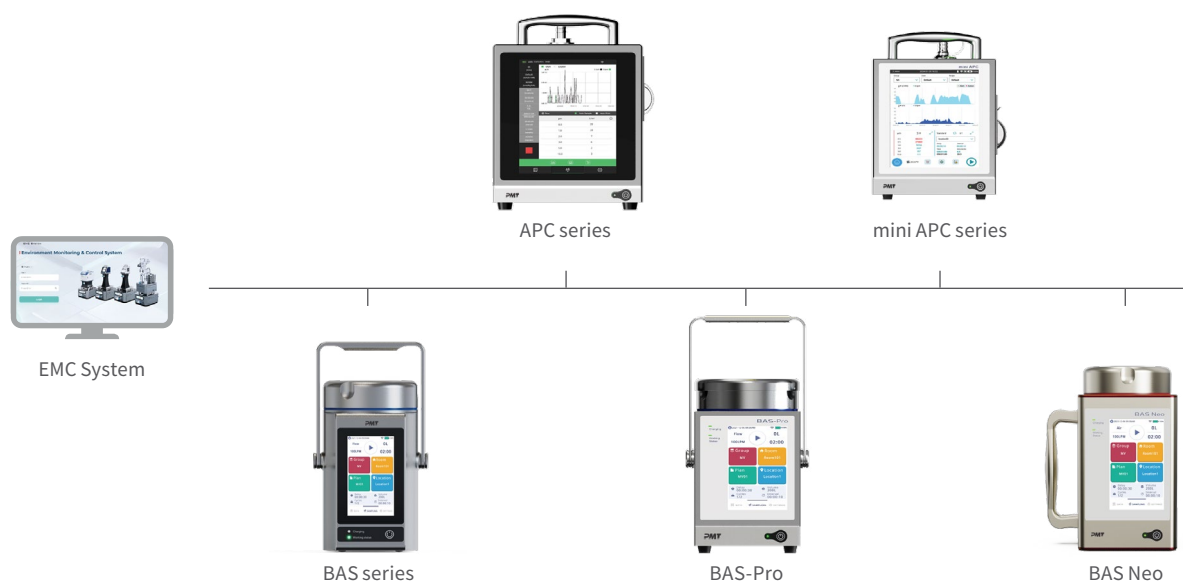
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Device details

Edit

Serial Number	A2400002	Name	mini APC
Type	mini APC	Model	A240
Flow Rate	28.3LPM	IP Address	192.168.3.83
MAC	-	Manufacturer	PMT
Work Status	Free	Device Status	Off-line
Current Charge	-	Manufacturer Date	2024-09-05
Activation Date	2024-11-04	Calibration Date	2024-09-05
Warranty Period	2 years	Warranty Expiry Date	2026-11-04
Maintenance State	Maintenance	Firmware Version	1.1.20+1.2.15
System Software Version	3.0.8	Other File	-
Device CUM Running	137h29min	Blower Hours	93h7min22s
Laser Hours	93h7min22s		

Flexible Deployment for Portable Devices



SOFTWARE INSTALLATION

Module	Configuration Requirement
Operating System	Windows® 7 or higher (32-bit or 64-bit)
Processor	2.6GHz or faster processor with 8 or more cores
Memory	16GB or higher
Storage Hard Disk	500GB or higher
USB Interface	2 USB 2.0 interfaces
Network Interface	At least 1 Gigabit network interface

Note: Disk space required depends on end user data backup requirements and protocols.

Generally, it is only necessary to increase the local disk capacity if storage needs increase. For scenarios with high redundancy requirements, it is generally required that the storage can support independent disk redundant arrays, such as Raid 1(eg:2×1T hard disk | RAID1) or to adopt a remote backup option.

SUPPORTED PORTABLE DEVICES & ORDERING INFORMATION

Name	Model	Order No.	Flow Rate
Airborne Particle Counter APC	A110	MACHA110	100LPM
Airborne Particle Counter APC	A120	MACHA120	50LPM
Airborne Particle Counter APC	A130	MACHA130	28.3LPM
Airborne Particle Counter-mini mini APC	A210	MACHA210	100LPM
Airborne Particle Counter-mini mini APC	A220	MACHA220	50LPM
Airborne Particle Counter-mini mini APC	A230	MACHA230	28.3LPM
Airborne Particle Counter-mini, Dual-Flow mini APC-DF	A240	MACHA240	28.3LPM; 100LPM
Airborne Particle Counter-mini, Dual-Flow mini APC-DF	A242	MACHA242	50LPM; 100LPM
BioAerosol Sampler BAS	C110	MACHC110	100LPM
BioAerosol Sampler (side handle) BAS	C210	MACHC210	
BioAerosol Sampler BAS	C130	MACHC130	28.3LPM; 100LPM; 200LPM
BioAerosol Sampler (side handle) BAS	C230	MACHC230	
Dual-Flow BioAerosol Sampler DBAS	C120	MACHC120	100LPM; 200LPM
Dual-Flow BioAerosol Sampler (side handle) DBAS	C2201	MACHC2201	
BioAerosol Sampler-Professional BAS-Pro	C2121	MACHC2121	28.3LPM; 100LPM; 200LPM
BioAerosol Sampler Neo BAS Neo	C320	MACHC320	100LPM; 200LPM
BioAerosol Sampler Neo BAS Neo (incl. HEPA filter)	C320F	MACHC320F	

Note: Requires BAS device software version V3.7.00 or above.