Particle Sensing Monitor
AES-FP Series

Measurement with sensor unit independently is possible.

AES-FPS (Sensor Unit)
57 × 83 × 23.7(mm)

CLASS 1,000 10,000 100,000

ISO 6 7 8

POWER REFERENCE

OFF ON

PARTICLE SENSING MONITOR
AES-FP

AES-FPM (Monitor)
87 × 120 × 46.5(mm)

Image in Full-size

The best way to monitor cleanliness level in the manufacturing process of precision parts and work environments at low cost.

Feature

◎ **Capable to detect suspended particles at low cost.**

◎ **Easy-to-check 4 step LED display for cleanliness level Class 1,000 to 100,000.**

◎ **Detect particles over 0.3μm (or 0.5μm) and over a few μm*** (*reference value).

◎ **5 models available for suitable application and communication interface.**

◎ **Detachable sensor unit to maintain continuous measurement during calibration.**

◎ **Temperature and humidity sensor available as an option.**

SHINYEI

Specification

Model #(0.3μm)：AES-□□□ Model #(0.5μm)：AES-□□□-5□	Particle Sensing Monitor				Particle Sensor Unit
	FPM-1 FPM-51	FPM-2 FPM-52	FPM-3 FPM-53	FPM-4 FPM-54	FPS FPS-5
Optical Source	Laser Diode				
Measurement Range	Class1,000 to Class100,000(*1)				
Unit	pcs/ ㎥ (Default), pcs/cf, pcs/L(*2)				
Data Update Time	1s				
Power	12 to 24V(*3)				
Power Consumption (max)	600mA				200mA
Operating Temperature	0 to 40℃				
Storage Temperature	-20 to 60℃				
Operating Humidity	30 to 80%rh				
Storage Humidity	Below 90%rh (No condensation)				
Output — LED Level Display	○	○	○	○	—
Output — Reference LED	○	○	○	○	—
Output — Analog Voltage(1-5V)	—	—	○	—	—
Output — Digital (Interface)	—	○ (Ethernet)	—	○ (Ethernet) (Wi-Fi)	○ (RS485)
Alarm Output	○	○	○	○	—
Temperature and Humidity Measurement(*4)	—	○	—	○	—
Weight	Approx. 210g				Approx. 65g
Applicable Wire Size	AWG26 to 20				

Detachable Sensor Unit

Sensor unit is detachable and replaceable with new sensor unit to maintain continuous measurement during the sensor calibration.
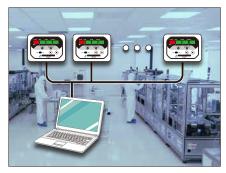

Specification for AES-FPM-□ & AES-FPS

Model #(0.3μm)： AES-□□□	Particle Sensing Monitor				Particle Sensor Unit
	FPM-1	FPM-2	FPM-3	FPM-4	FPS
Detectable Particle Size	Over 0.3μm / Over a few μm （Reference）				
Output Average Time	60 s				

Specification for AES-FPM-5□ & AES-FPS-5

Model #(0.5μm)： AES-□□□-5□	Particle Sensing Monitor				Particle Sensor Unit
	FPM-51	FPM-52	FPM-53	FPM-54	FPS-5
Detectable Particle Size	Over 0.5μm / Over a few μm （Reference）				
Output Average Time	300 s				

Application

Multi-point Measurement in Cleanroom
Capable to measure at multi ple points at the same time. Easy network construction.

For Printing System Control to Keep Its Quality
Continuous monitoring enabels to notify abnormal event occurrence and prevent contaminant particles adhesion to products.

Monitoring at Data Center and Server Room
Constant monitoring in places where particles accumulation is disliked. Contribute to managing cleaning frequency.

Calibration Service

Annual calibration of sensor unit is recommended.
For details, please contact retailer or us directly.

● Issued Documents:
・Calibration Certificate
・Inspection Report
・Traceability System Diagram

Temperature and Humidity Sensor (Optional)

Connect optional sensor（CHU-L151-11A-AES）to Particle Sensing Monitor for monitoring temperature and relative humidity continuously.