



# Optical Particle Counter

## Multichannel OPC

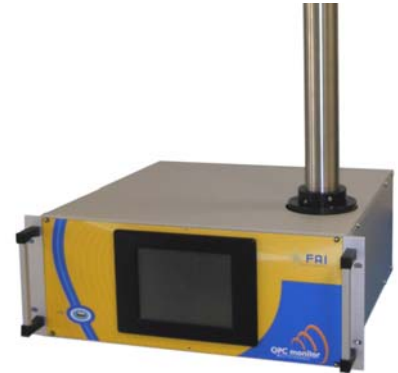


### Main Features:

- Operating flow rate 1,0 l/min
- Flow rate control accuracy  $\pm 2\%$
- Detected granulometric class  $> 0.28 \mu\text{m}$  (optical diameter)
- Reading cycle in continuous
- Dimensional resolution  $0.05 \mu\text{m}$
- Real-time estimate of the suspended PMx particulate matter mass concentration

Multichannel optical particle counter for real time and continuous characterization of the airborne particulate matter in the range  $> 0.28 \mu\text{m}$  in 8 contiguous granulometric fractions.

This version can work both in "standalone" mode, using internal processor and memory, and in "integrated" mode, with the Swam 5A Monitors for data storage and subsequent elaboration.

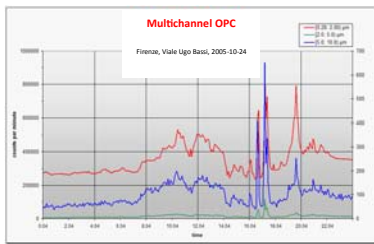


gives the suspended particulate matter daily trend, putting in evidence its trend in real time (number and granulometric size).

### TYPICAL CONFIGURATION Swam 5A (one and double channel) + OPC

Swam 5A (one and double channels) gives the 24h mass concentration average value at high precision and reliability level, while the optical particle counter

The OPC system measures the number of particles using the "Light scattering" physical principle, which allows an high accuracy level in particle detection.



## Technical Specifications

**Measurement principle**  
**Dimensional resolution**  
**Dimensional sensitivity**

Laser scattering on elliptical mirror  
 10% (typical)  
 $0.28 \mu\text{m}$  ( $50 \pm 10\%$  count efficiency) [In compliance with ISO 215001-4 Standard, where applicable]

**Channels**

8 optical channels with calibration thresholds [ $\mu\text{m}$ ]: 0.28, 0.4, 0.5, 0.7, 1.1, 2.0, 3.0, 5.0

**Field Calibration**  
**Sampling interval**  
**Operating mode**

recommended every 12 months  
 1 min  
 - Stand alone  
 - Integrated with SWAM 5a Monitor (mono or multi channel) [optional]

**User interface**  
**Data download**  
**Sampling flow rate**

Panel PC with touch screen  
 USB memory key  
 1.0 L/min

**Dilution flow rate**  
**Flow rate control accuracy**

From 1 to 5 l/min programmable by Panel PC  
 $\pm 2\%$  of the nominal value

**Power supply**  
**Operating conditions**

230 Vac, 50 Hz single phase  
 Temperature from  $-5^\circ\text{C}$  to  $+35^\circ\text{C}$   
 Relative Humidity  $< 85\%$  (with no condensate)  
 Temperature from  $-10$  to  $+60^\circ\text{C}$

**Storage conditions**

**Size and Weight**

	W x D x H [mm]	Weight [kg]
- Control Unit	450 x 440 x 170	10
- Sensor (with Dilution device)	200 x 300 x (170 + 310)	5

