

SafyrOPC

Optical Particle Counter for Continuous Monitoring



PARAMETRES

Detection of particles from 0.5µm to 2.5µm

Flow rate of 2.83 L/min

Accelerometer

COMMUNICATION

Instant LoRa wireless transmission

Continuous channel reading

POWER

Mains power and battery (1 week)



TYPE OF

ENVIRONMENT

Grade A, B, C and D

ISO 5, 7, 8

(Non-Grade A

Submitted Pics PE009 -

GMP Appendix 1)

Advanced Clean Room Real-Time Particle Monitoring

Energy savings, sleep mode, process security, incident detection

Designed exclusively for clean room use and controlled environment, the connected particle counter SafyrOPC is dedicated to the monitoring of Class A* to D, ISO 5-7-8 environments, in the Pharmaceutical, Biotechnological, Medtech, Hospital, Microelectronics, Aerospace, etc.

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TECHNICAL SPECIFICATIONS

Count channels	0.5 to 2.5µm
Smallest channel measured by SafyrOPC Sensor	0.3 µm
Limit concentration	8500 000 part/ft3
Direct debit:	2.83 l/min (0.1 cfm)
Sampling flow error	+/- 10%
High efficiency filtration at discharge:	patented
Accelerometer	Yes
Sampling Time / Sample Volume:	Cumulative 10 minutes moving average/ 28.3 l
Update frequency	1 minute
Unit	Particles per Cubic Feet (Part/CF)
Calibration	Monodisperse latex sphere (NIST certificate) - ISO 21501-4 calibration bench
Counting efficiency: Manufacturer	Channel 0.3µm: (35 +/- 15) % Channel 0.5µm: (100 +/- 20) %
Counting efficiency: Using Lyra (Corrected)	Channel 0.3µm: (5 +/- 20) % Channel 0.5µm: (100 +/-10) %
Statistical rate of false counting (All Channels $\geq 0.3 \mu\text{m}$):	$\leq 70.7 \text{ part/m}^3$ or $\leq 2 \text{ part/CF}^3$
Power	On batteries or mains 5VDC - 1A
Energy Block SB Model:	Autonomy (O mains): 12h - LiPo battery 3.7V 4.5Ah
Energy Block Model AB168	Autonomy (O mains): 168h - 3.7V 18Ah LiPo battery
Communication	Propriate LoRa
Frequency range	869.5 MHz / 2.4 GHz
Number of channels available (1 receiver per ID)	5
Propriate LoRa (869,5 MHz)	<400m free field /5.50m indoor
Decontamination	Materials compatible with surface disinfectants by wiping. Resistant to H2O type airborne
Environmental conditions of use	Temperature: 5-35°C/Humidity: 0-70% (Not condensed)
Size	Height: 147 mm / Diameter: 103mm
Weight	SafyrOPC with Energy block SB: 420 g SafyrOPC with Energy block AB168: 720 g
Case material	White part: ABS-PC/ Di using part: PC
SafyrOPC delivered with:	HEPA H14 filter - isokinetic probe - Power Cord Operating instructions - Installation certificate - Calibration certificate