

DATASHEET

Particle counter **particleguard II**





Measuring system for high-precision, optical particle counting in compressed air, nitrogen and gases

High-precision, optical laser particle counter for use in compressed air and technical gases

High-precision optics for detecting the smallest particles down to $0.1 \mu\text{m}$ and therefore suitable for monitoring compressed air class 1 in accordance with ISO 8573-1

The flow rate of 28.3 l/min (1 cfm) is 10 times that of the particle counters generally available on the market (usually 2.83 l/min)

Advantage: Counts the smallest particles with high counting accuracy

Digital data transmission (Modbus-RTU) allows 3 measuring channels to be used simultaneously (error-free due to checksum) can be transmitted simultaneously

The class 1 filter included in the scope of delivery can be used for on-site calibration at any time. This allows contamination of the optics to be quickly detected or ruled out



Measuring system for high-precision, optical particle counting in compressed air, nitrogen and gases

Technical data:

Print area:	max. inlet pressure at the pressure reducer: 40 bar
Measuring medium:	Compressed air, (free from aggressive, corrosive, caustic, toxic, flammable and oxidizing components), as well as N ₂ , O ₂ and CO ₂
Measured variable:	Number of particles per m ³ (based on expanded air: 20°C, 1000 hPa) Size channels: Particle size 0.1...0.5 µm Particle size 0.5...1.0 µm Particle size 1.0...5.0 µm
Ambient temperature:	+5°C...+40°C
Sample gas temperature:	0°C...+70°C
Sample gas humidity:	<= 90% rel. humidity, pressure dew point max. +10°C, non-condensable humidity
Sample gas flow rate:	28,3 l/min (1 cfm)
Application range:	For compressed air after filtration; for gases / high-purity gases also without filtration
Light source:	Laser diode
Sample gas connection:	6 mm PTFE hose incl. quick coupling
Outputs (digital):	RS 485- interface (Modbus RTU)
Dimensions:	150 x 200 x 300 mm (h x w x d)
Weight:	approx. 8 kg
Power supply:	24 VDC, 300 mA
Housing:	stainless steel