

# ACS

## Air Count System



### At a glance

- Size range from 0.1  $\mu\text{m}$  with a maximum of 16 freely selectable particle size channels
- Evaluation pursuant to ISO 14644
- Measuring pursuant to ISO 14644-1, VDI 2083, DIN 1946-4, EU-GMP, Fed-209 E
- Electronically monitored air volume control
- Connections for air velocity, differential pressure and Temp/RH probes
- Intelligible entry dialogue
- Easy multilingual menu navigation (German/ English/ French/ Turkish)
- Alphanumerical input
- Speed button for entry of ID numbers
- Made in Germany by KM OptoElektronik GmbH

The ACS series optical particle counter covers the size range 0.1 to 25  $\mu\text{m}$  according to standards ISO 14644-1, VDI 2083, DIN 1946-4, EU-GMP and Fed-209 E. Due to its compact and lightweight construction the ACS particle counter is an excellent choice for both stationary and mobile application.

### Optional accessories

- Software PWIN for single application, PMULTI for networking
- Aerosol generator AG250, AG2500
- Dilution system VD100
- Isokinetic probe
- High-Pressure-Diffuser
- Air velocity probe, differential pressure probe, Temp/RH probe
- Remote start/ stop
- Internal 3.5" floppy drive
- Aluminium case
- Wheeled stand
- **and much more accessory you can find on our homepage or simply give us a call**

### Benefits

Probes for air velocity, differential pressure, temperature and Temp/RH can be connected directly. The system allows to print out all data via thermal printer and/or to store them on a floppy disc. By using RS232/ RS485 interface the control and evaluation via PC is enabled. Furthermore, the ASC offers the feature to network the devices for filter testing stands respective monitoring systems.

### Applications

Realize control and supervision of:

- Clean rooms
- Laminar flow boxes and safety work benches
- Filter units in operating theatres
- Ambient areas of filling systems in the pharmaceutical industry
- Process media
- As well as efficiency and integrity of filters

### Handling

User friendly, efficient handling is ensured by the easy, multilingual menu navigation. During the measurement the LCD display shows an overview of the chosen particle size channels as well as time, measuring and rinsing time. The results may be displayed in tabular or histogram form.

## Specifications\*

Features	ACS 128	ACS 228	ACS 328	ACS 528
Size Range [ $\mu\text{m}$ ]	0.1 - 2 (5)	0.2 - 5	0.3 - 10 (25)	0.5 - 10 (25)
Particle Channels	Standard setting or a maximum of 16 freely selectable particle size channels			
Counting Efficiency per ISO 21501-4	50% at 0.1 $\mu\text{m}$ 100% at > 0.15 $\mu\text{m}$	50% at 0.2 $\mu\text{m}$ 100% at > 0.3 $\mu\text{m}$	50% at 0.3 $\mu\text{m}$ 100% at > 0.45 $\mu\text{m}$	50% at 0.5 $\mu\text{m}$ 100% at > 0.75 $\mu\text{m}$
Concentration Limit	1 Mio./ 1 CFM			
Light Source	Laser diode			
Optical System	90° scattered light cumulating optics			
Zero Count	Per ISO 21501-4: < 1 count/ 5 min.			
Flow Rate	1 CFM; 28.3 L/ min.			
Flow-Generator	Vacuum pump			
Flow-Control	Electronically monitored			
Calibration	Per ISO 21501-4: Latex-Aerosol			
Sampling Modes	Single measuring with 1 - 9 measurements for each cycle and automatic averaging, or continuous measuring with automatic averaging of 2 - 9 measurements each			
Sampling/ Rinsing Time	1s to 99h, 59min, 59s			
Communication Mode	Standard RS 232 for single application, RS 485 for networking			
Data Storage	50.000 sample records			
Display and Operation	Backlight graphics LCD display, 240 x 128 membrane keyboard with 20 alphanumeric keys			
Languages	German/ English/ French/ Turkish			
Data Content per Record	Date, time, ID number, alphanumeric key, measuring and rinsing time, 16 particle size channels with cumulative particle count			
Software	PWIN for single application, PMULTI for networking			
Printer	Thermal printer 58 mm			
Environmental Sensor Interface	Air velocity (0 - 2 m/s), differential pressure (0 - 50 Pa), Temp/RH (T: 15 - 35 °C, H: 0 - 100 %)			
External Surface	Stainless steel, anodized aluminium optional			
Dimension D x W x H	25 cm x 36 cm x 15 cm			
Weight [Kg]	7.5			
Power Supply	230/ 115 VAC, 50/ 60 Hz, max. 400 Watt			
Battery	Removable/ rechargeable Li-Ion batteries optional			
Battery Life	< 4 h			
Battery Recharge	Approx. 4 h			
Audible Alarm	Single particle detection by acoustics, threshold exceeding alarm adjustable			
Standards	ISO 14644-1, VDI 2083, DIN 1946-4, EU-GMP, Fed-209 E			
Operating Range	5 - 35 °C, 10 - 80 % RH, noncondensing			
Delivery Contents	Particle counter, isokinetic probe with 3 m antistatic tubing, power supply, manual, certificate			

\* All information is non-binding; specifications are subject to change without notice.