

# Seta AvCount Lite SA1800-2

## Portable Light Extinction Particle Counter

ASTM D975; ASTM D6786; ASTM D7619; IP 565; IP 630; JIS 9932:2012;  
JIS B 9933:2021; JIS B 9934:2012

- ISO 11171 calibration
- Cumulative Particles/ml
- ISO 4406 Cleanliness Codes
- Simple operation
- Portable, compact instrument
- Under 3 minute test time
- Online/offline sampling
- Stand-alone or PC controlled
- PC programmable
- Integrated printer
- Optional battery for portable use



Fuels • Hydraulic Oil • Light Lubricants

## Technical Specifications

Operation	
Principle of operation	Laser obscuration
Test methods	3 embedded test methods, user programmable via PC Supplied with ASTM D7619; IP 565; ISO 4406 pre-installed
Particle size range	ISO 11171: 4µm(c) to >70µm(c) (calibration for larger sizes available on request)
Test duration (ASTM D7619; IP 565)	Less than 3 minutes
Pressure (max)	Online pressure 10 Bar, pressure reducing valve for high pressure max 300 Bar
Sample temperature range	Ambient 0 to 70 °C
Operating temperature range	Ambient 5 to 40 °C
Relative humidity (max)	80% @ 40 °C
Sampling method	Bottle sample or online connection
Programmable test method parameters (via PC)	Size Protocol (number of repeat measurements, flush volume before first measurement, flush volume between measurements, flush between measurements) Single or automated repeat tests, interval between repeat tests
Display and control system	Yellow on black high contrast display, simple menu driven system with rotate and push control
Measurement	
Measuring channels	6 size channels displayed on instrument, up to 16 programmable via PC 4µm(c), 6µm(c), 10µm(c), 14µm(c), 21µm(c), 25µm(c), 30µm(c), 38µm(c), 70µm(c)
Counts per measurement (max)	60,000 per ml
Coincidence error limit	60,000 particles/ml $\geq 4\mu\text{m(c)}$ with $\leq 5\%$ co-incidence error (ISO 11171)
Sample viscosity (max)	64 mm <sup>2</sup> /s (using internal pump), 200 mm <sup>2</sup> /s (pressure fed @ 3 BarG) (SA1950-0 Sample Delivery System is available as an accessory)
Sample volume (typ)	80 ml for ASTM D7619 & IP 565, from 20 ml for other methods (includes flush cycles)
Sample delivery	Integral Dual Piston Pump (DPS) downstream of the cell
Sample flow rate	30 ml/min $\pm$ 5 ml/min
Data Management	
Results format	Cumulative, Particles/ml, ISO 4406 cleanliness codes/classes (differential when programmed via Partikel software)
Memory	900 result memory Date/time indexed (last 20 tests can be viewed on screen) Download to PC/laptop port or ProTrend software and print via internal printer
Connectivity	USB Type B - connection to PC for use with the software suite
Number of calibration points	16 (MTD)
Power requirements	
Voltage	12 Vdc Optional 12 Vdc battery and charger (SA1816-0)
Physical	
Size (HxWxD) / Weight	250 x 145 x 350 mm / 7.4 kg
Construction	Coated steel outer case