

ISO 21501-1:2009-06 (E)

Determination of particle size distribution - Single particle light interaction methods - Part 1: Light scattering aerosol spectrometer

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Terms and definitions	1
3 Requirements	3
3.1 Size range	3
3.2 Counting efficiency	3
3.2.1 General	3
3.2.2 Lower size limit	4
3.2.3 Upper size limit	4
3.3 Size resolution	4
3.4 Sizing accuracy	5
3.5 Sampling flow rate	5
3.6 Effective detection flow rate	5
3.7 Maximum particle number concentration	5
4 Test method	5
4.1 Size calibration	5
4.2 Effective detection flow rate	6
4.3 Maximum particle number concentration	7
4.4 Size resolution	8
4.5 Counting efficiency	9
Annex A (informative) Principle of the instruments	11
Annex B (informative) Particle size standards	18
Annex C (informative) Effects of the LSAS parameters on the particle size and particle number concentration determination	21
Annex D (informative) Representative sampling	22
Annex E (informative) Example of an LSAS calibration with DEMS-classified PSL particles	24
Bibliography	26