

SP2-XR

Single Particle Soot Photometer – Extended Range

Specifications

Parameter	Specification
Measured Parameters	Single-particle laser incandescence Single-particle light scattering
Derived Parameters	Single particle black carbon mass Single particle size distribution for purely scattering particles
Auxiliary Parameters	Temperature – Air, Computer, Laser Pressure – Cavity and Flow Controller Flow – Sample and Sheath
Particle Size Range	Scattering Channel: 100-500 nm diameter Incandescent Channel: 50-800 nm diameter (Assumes black carbon density of 1.8 g/cm ³)
Laser	Nd:YAG Laser – 1064 nm, up to 1 MW/cm ² intracavity circulating power
Sample Flow	30-120 standard cm ³ /min
Computer System	Intel i7-6600U CPU 8 GB RAM 128 GB mSATA SSHD
Weight	13 kg (28.5 lbs)
Dimensions	W: 20 cm, H: 21.5 cm, L: 40.5 cm, not including inlet hardware and fuses