

IN102X

AirPhoton Extended Range Size Scanning Nephelometer



Dual pressure taps in inlet to provide accurate flow monitoring

The IN102X extended range nephelometer is built to the same standards as our IN102 instrument. In addition, it has the capability to extend its measurement range down to a separate size bin for PM1. The additional data range allows us to derive a full optical particle size distribution in about 30 - 40 minutes.

Capabilities

- Forward and Back Scatter measurements
- Three wavelengths
- High Speed fan
- Feedback Flow control system
- Multiple Size Cuts
- Determines Size distribution

Suggested use

High precision measurements for various aerodynamic size cut-offs under all conditions for air quality & health and climate applications with ability to obtain size distribution.

Specifications

- Dimensions: 9" x 10" x 24"
- Mass: 6.8 Kg
- Operating temperature: -30 to +45°C
- Wavelengths: 450, 532, and 632 nm
- Angular range: 7 to 90° ; 90 to 170°
- Full scattering = forward + back scattering
- Standard range: 0.0-3,000 Mm⁻¹
- Extended range: 20,000 Mm⁻¹ (upon request)
- Lower detectable limit:
 - < 0.15 Mm⁻¹ (at 60 sec AVG)
 - < 0.06 Mm⁻¹ for Backscattering (60 sec AVG)
- Time resolution: 15 sec standard - 1 sec minimum
- Sensitivity: < 0.1 Mm⁻¹
- Intensity: < 0.01 mM⁻¹

- Clean air reference option provides automatic zero for span calibration
- Data Interfaces: 4GB SD card (possible up to 32GB), RS 485, and USB