

# PI Neph | AirPhoton Polar Imaging Nephelometer

The Polar Imaging Nephelometer is a high grade laboratory instrument designed for an in-depth understating of particulate properties. It provides a full particle characterization including the size distribution and the complex refractive index from hyperangle scattering measurements. Its high capabilities include: light scattering from  $3^{\circ}$  to  $176^{\circ}$ , angular resolution of less than  $1^{\circ}$ , customizable option for 1 - 3 wavelengths and polarization.



## Specifications

- Operational temperature: 5 to 40 °C
- Wavelengths: Up to 3 in the range of 400-680 nm Polarization: P11 and P12 measurements. Other stokes parameters options available
- Angular Range: At least 100 angles from  $5-175^{\circ}$  Range: 0.0 to  $>20000$  Mm<sup>-1</sup> Lower detectable limit:  $< 1$  Mm<sup>-1</sup> for phase function measurements Programmable flow rate: Available Flow range: 2 to 20 lpm & Optional Particle size selection: Optional cycling up to 4 cut off sizes External pump option: Available Automatic Zero and Span check: Automatic Zero with clean air system.
- GRASP software. Included for span calibration Light source: Laser Dimensions: 200\*100\*50cm Weight:  $< 30$  Kg Storage memory: Internal SSD hard drive Data Transfer: USB, Ethernet, wifi Environmentally rugged: For Indoor or Aircraft Use
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## Capabilities

- Size Distribution retrieval.
- Determines sphericity.
- Measures complex refractive index.
- Full particle characterization from hyper-angle scattering measurements.
- Measures light scattering ( $3^{\circ}-176^{\circ}$ ).
- Angular resolution of  $< 1^{\circ}$
- Standard configuration: 2 visible wavelengths (customizable for 1-3 wavelengths).
- GRASP™ software analysis package included.

## Suggested use

For specific scientific research purposes looking for in depth and advanced characterization of particulate properties in laboratory or aircraft settings.



Scan for more information



### Australian Sales and Support.

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