

Currently taking orders for the 2019 build.

The AirPhoton Laser Imaging Nephelometer

**Full Particle Characterization:
Size Distribution and Complex Refractive Index
From Hyperangle Scattering Measurements**



- Measures light scattering from 3° to 176°
 - Angular resolution of less than 1°
 - Standard configuration is 2 Visible Wavelengths
 - Can be customized for 1 – 3 wavelengths
 - Can be customized to include UV
 - Polarization options
 - GRASP™ software analysis package retrieves size distribution, percent sphericity and complex refractive index
- www.grasp-open.com



LI-Nephelometer image of particle scattering

Orders must be received by Dec 31, 2018. Delivery anticipated in September 2019.

AIRPHOTON

Innovative Technology for Earth and Space

1450 South Rolling Road
Baltimore, MD 21227
Sales@airphoton.com

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References:

Investigating biomass burning aerosol morphology using a laser imaging nephelometer.

Manfred, K. M., Washenfelder, R. A., Wagner, N. L., Adler, G., Erdesz, F., Womack, C. C., Lamb, K. D. Schwarz, J. P., Franchin, A., Selimovic, V., Yokelson, R. J., and Murphy, D. M.
Atmos. Chem. Phys., 18, 1879-1894, <https://doi.org/10.5194/acp-18-1879-2018>, 2018.

Retrievals of aerosol optical and microphysical properties from imaging polar nephelometer scattering measurements.

W. R. Espinosa., Remer, L. A., Dubovik, O., Ziemba, L., Beyersdorf, et. al. (2017).
Atmospheric Measurement Techniques, 10(3), 811-824.

<http://dx.doi.org/10.5194/amt-10-811-2017> <https://www.atmos-meas-tech.net/10/811/2017/>

In situ measurements of angular dependent light scattering by aerosols over the contiguous United States.

W. R Espinosa, J. Vanderlei Martins, Lorraine A. Remer et.al. (2017)

Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2017-941>

<https://www.atmos-chem-phys-discuss.net/acp-2017-941/acp-2017-941.pdf>

Espinosa, W. R. (2017). *Comprehensive airborne in situ characterization of atmospheric aerosols: From angular light scattering to particle microphysics* (Order No. 10639352).

Available from Dissertations & Theses @ UMBC; ProQuest Dissertations & Theses Global. (1984589840).

<http://proxy-bc.researchport.umd.edu/login?url=https://search.proquest.com/docview/1984589840?accountid=14577>

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