

# IN101T | AirPhoton Basic Integrating Turbo Nephelometer



Our basic nephelometer designed for robust operation under a wide range of conditions. While its rugged design allows for field deployment, it is also a highly sensitive instrument which can be used in the laboratory or modified for use in aircraft. In this regard, the IN101T is highly versatile and can work in different environments and for different purposes.

## Capabilities

- Forward and Back Scatter measurements
- Three wavelengths
- High Speed fan

## Suggested use

Measurements of all particle sizes at normal ambient conditions as well as for situations where higher pressure intake is required - i.e. high altitudes, clean condition or long inlet tubes.

## Specifications

- Dimensions: 9" x 10" x 24"
- Mass: 6.7 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<sup>-1</sup>
- Extended range: 20,000 Mm<sup>-1</sup> (upon request)
- Lower detectable limit:
  - <0.15 Mm<sup>-1</sup> (60 sec AVG)
  - < 0.06 Mm<sup>-1</sup> for Backscattering (60 sec AVG)
- Time resolution: 15 sec standard - 1 sec minimum
- Sensitivity: < 0.1 Mm<sup>-1</sup>
- Clean air reference option provides automatic zero for span calibration
- Data Interfaces: 4GB SD card (possible up to 32GB), RS 485, and USB