



# WIBS-NEO

WIDEBAND INTEGRATED BIOAEROSOL SENSOR

**NEW ELECTRONICS OPTION**  
PROVIDES DETAILED INFORMATION ON  
ATMOSPHERIC, AIRBORNE BACTERIA,  
MOLDS, AND POLLEN.

## OVERVIEW:

The Wideband Integrated Bioaerosol Sensor New Electronics Option provides highly sensitive measurements of mold and other bioaerosols. The instrument uses a UV xenon source to excite fluorescence in individual particles. Unlike UV lasers, the UV xenon source allows for the precise selection of particular excitation bands. These wavebands have been selected to optimize detection of common bioaerosols (tryptophan and NADH.)

## APPLICATIONS:

- » Bioaerosol research (mold, pollen, fungi)
- » Air quality studies
- » Health effects research
- » Suitable for airborne or ground-based sampling

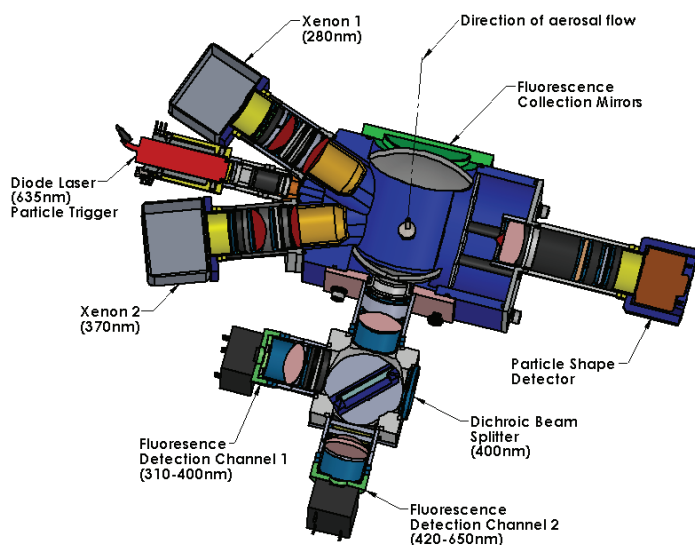
## FEATURES AND ADVANTAGES:

- » Provides complete particle-by-particle information for particles from 0.5 to 50  $\mu\text{m}$
- » Fluorescence excitation at 280 and 370 nm
- » Fluorescence emission from 310-400 nm (tryptophan) and 420-650 nm (NADH)
- » Particle size
- » Asymmetry Factor
- » Electronic volumetric flow controllers
- » Expanded housekeeping parameters
- » Windows 7 embedded operating system
- » Software adjustable sample and sheath flow rates
- » IR reflective paint minimizes solar heating
- » Ability to view particle trace response in real time
- » Integral power supply, universal voltage input
- » IP-54 cover to protect the instrument from damage
- » Improved sensitivity and resolution of fluorescence measurements
- » Dual gain for particle sizing and fluorescence on all channels
- » No lost data due to electronics and computer processing lag



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## SPECIFICATIONS

MAXIMUM CONCENTRATION:	3,000 particles/L for full measurement (10% coincidence) 10,000 particles/L for sizing and counting (10% coincidence)
FLUORESCENCE EXCITATION:	280nm, 370nm
FLUORESCENCE EMISSION:	310-400nm, 420-650 nm
FLOW RATE:	Sample: 0.3 L/min
PARTICLE SIZE RANGE:	0.5 to 50 um
SHEATH:	2.1 L/min
POWER REQUIREMENTS:	100W, 90-230 VAC or 24 VDC at 3.0A
WEIGHT:	27.5 lbs
DIMENSIONS:	17.75"w x 14.25"L x 9.5"H (add 2" for inlet at top)

## INCLUDED ITEMS:

- » Analytical Instrument
- » Internal Computer
- » Software
- » Shipping Case
- » One-year warranty
- » Software toolkit for data analysis

