ALS-OD4
Process Grade
Optical Density / Light Sensor

The ALS-OD4 sensor measures both optical density and light within an algae culture. The optical density correlates accurately with algae density. Standard ¾” NPT threads on the front and rear of the housing allows for versatile process mounting configurations. The sensor uses reflective infrared technology for density measurement and maintains accuracy in dense cultures. The viewing window is oriented perpendicular to the body allowing the sensor to be oriented through 360 degrees.

Materials and Environment

- **Body**: PVC
- **Window**: Polycarbonate
- **Connection**: Dual ¾” NPT Threads
- **Temperature Range**: 0-50°C 107.95
- **Dimensions**
  - Body: 25.5 mm OD, 108 mm length 20.574
  - Tip: 20.5 mm OD, 63.5 mm length 63.5
  - 26.67

Measurement

- **Optical Density Range**: 0-250
- **Optical Density Resolution**: 0.1
- **Light Range**: 0-60,000 Lux
- **Light Resolution**: 1 Lux
- **Required conditioning cable**: ALS-BOD-DA
- **Minimum density required**: Approx 0.1 g/L

Features

- Dual ¾” NPT threads allow for pole mount or insertion mount for a variety of process applications
- Optical Density measurement at 890 nm wavelength is unaffected by ambient light
- Once calibrated to individual strains, provides values for algal density
- Accurate density measurement even in very dense slurries
- Light sensor measures PAR wavelengths and can be calibrated to measure long wavelength reds