DATA SHEET

FULL-SPECTRUM PAR LIGHT SENSOR

SKU: 990-0003-01

Amplified full-spectrum PAR sensor with 0–5 V output and rugged design for precise light measurement.

Accurately measure photosynthetically active radiation with this full-spectrum PAR light sensor. Featuring a 0–5 V amplified output, rugged waterproof design, and fast response time, it ensures reliable PAR data in greenhouse, field, or lab settings. Ideal for precision agriculture, research, and lighting control systems.

SPECIFICATIONS	DETAILS
Power Voltage	24VDC
Output (sensitivity)	1.25 mV per µmol m^{-2} s^{-1}
Calibration Factor	0.8 µmol m^{-2} s^{-1} per mV
Measurement Repeatability	Less than 0.5%
Measurement Range	0 to 5 V (corresponds to 0–4,000+ µmol m^{-2} s^{-1})
Non-linearity	< 1 % (up to 4000 µmol m^{-2} s^{-1})
Response Time	Less than 1 ms
Field of View	180°
Operating Environment	–40 to 70 °C; 0–100 % RH; submersible
Dimensions	30.5 mm diameter, 37 mm height

Performance

- Measures PAR in full sunlight and controlled environments
- Amplified 0–5 V analog signal
- Less than 1 % non-linearity and <0.5 % repeatability
- 180° field view with cosine-corrected directional response
- Spectral Range: 389 to 692 nm ± 5 nm (wavelengths where response is greater than 50% of maximum)

Connectivity

- Easily integrates into Pearl controller
- Powered by 24VDC
- Fixed mounting via leveling plate ensures accurate alignment

What's Included

- Full-spectrum sensor with rugged, anodized aluminum body and 20m cable
- Leveling plate
- Mounting hardware