

Guardian CEA Multi-Sensor

Monitors PAR or ePAR, DLI, humidity, CO₂, VPD, and air temperature

NEW!



Introduction

- Accurate measurements of the most important indoor environmental parameters in one elegant device
- Works as a stand-alone device or integrates into systems for greenhouses, grow rooms, and vertical farms

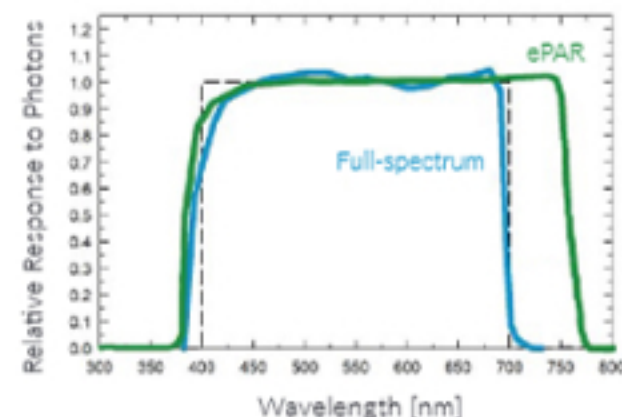
Features

- User-friendly, accurate datalogger with multiple integrated sensors
- PAR or extended PAR sensor options
- Data can download to smartphones or dataloggers via Modbus or Bluetooth
- Graphical summaries of data over days, weeks, or months with the ApogeeConnect app for iOS and Android
- Hangs by thin wires or mounts to a mast
- Integrators should contact Apogee for deployment opportunities

Measurements

- Fan-aspirated air temperature
- Instantaneous PAR or ePAR
- Daily light integral (DLI)*
- Photoperiod*
- Humidity
- Vapor pressure deficit and dewpoint
- CO₂ concentration
- Barometric pressure

*DLI and photoperiod measurements are only accessible via Bluetooth



| | SM-500 (PAR) | SM-600 (ePAR) | Temperature | Relative Humidity | CO ₂ | Barometric Pressure |
|---------------------------------|--|---------------|------------------|---------------------|--------------------------------------|---------------------|
| Calibration Uncertainty | ± 5 % | | ± 0.2 C | ± 3 % from 20 to 80 | ± 50 ppm + 2 % of the measured value | - |
| Long-term Drift (non-stability) | Less than 2 % per year | | Less than 0.02 C | | - | |
| Measurement Range | 0 to 4000 μmol m ⁻² s ⁻¹ | | -60 to 80 C | 0 to 95 % | 0 to 2000 ppm | 70 to 110 kPa |
| Spectral Range | 389 to 692 nm | 383 to 757 nm | | | - | |
| Temperature Response | -0.11 % ± % per C | | | | - | |
| Operating Environment | -40 to 60 C with 0 to 95 % relative humidity | | | | | |
| Connectivity | Modbus (RS232 and RS485) and/or Bluetooth | | | | | |
| Current Draw | Typical: 92 mA at 12 V; Peak: 500 mA at 12V | | | | | |
| Data Storage | 9 months of 1 min data | | | | | |
| IP Rating | IP53 | | | | | |