

LINPAR - Linear PAR Sensor

Product Overview

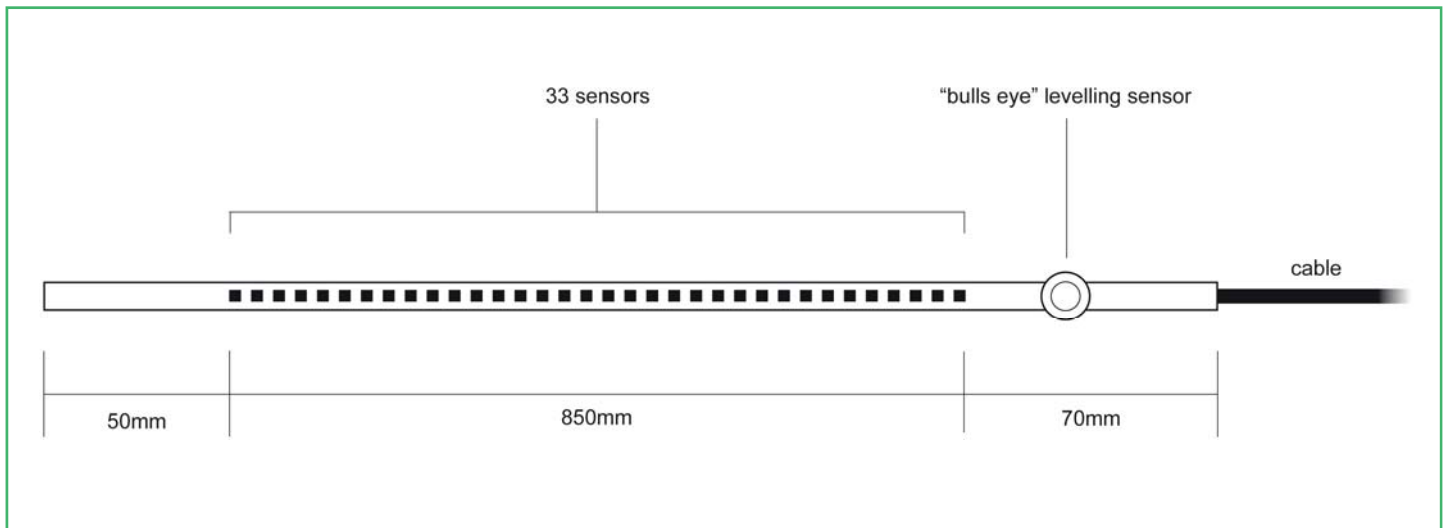
The LINPAR is designed for the measurement of photosynthetically active radiation (PAR) within plant canopies. There are 33 sensors that are mounted within a 1 metre anodised "U" section tube.

The sensors are covered with a 3mm diffuser providing an integrated reading over 850mm section of the sensor.

At the cable end there are no sensors in the first 70mm and in the last 50mm at the distal end to provide for attachment. An integral "bull's eye" levelling sensor is provided.



LINPAR positioned within a canopy



- The LINPAR is ideally suited to be connected to the Light Sensor Meter (LSM).
- For complete canopy monitoring solutions the LSM-LINPAR can be used with the SFM1 Sap Flow Meter, PSY1 Psychrometer and the DR26 Dendrometer.
- The LSM can support up to 10 LINPAR sensors for complete canopy light characterisation.
- Variables calculated include PAR, leaf area index, sunflecks, and canopy extinction co-efficient.



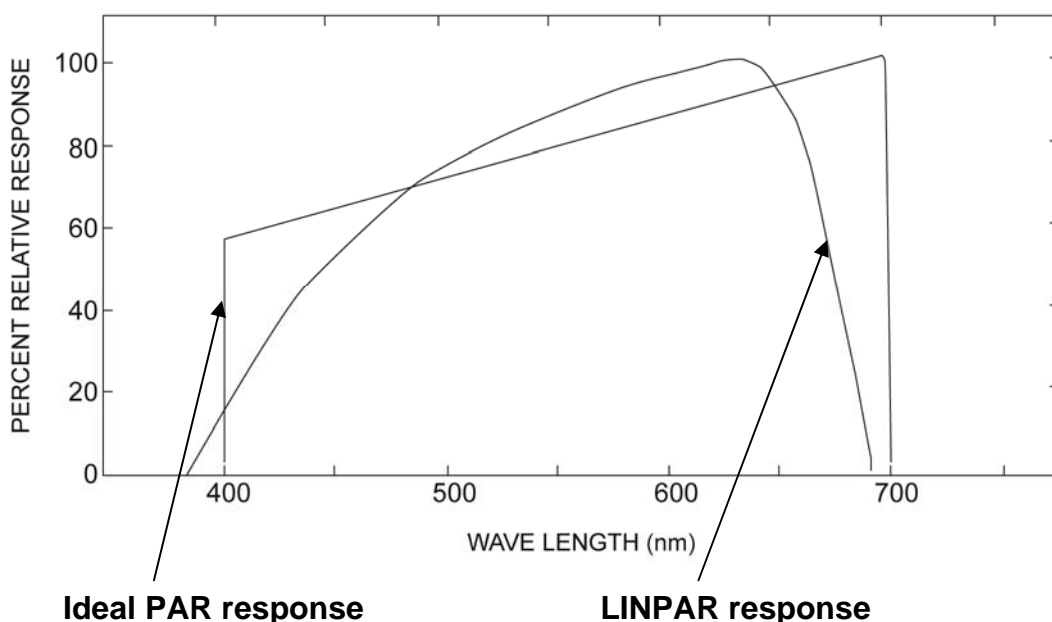
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LINPAR Specifications

Specifications	
Materials	Anodised Aluminium, Acrylic. IP65 sealed
Cable	5m Enhanced polyethylene screened twin 18 x 0.1mm
Sensor	33, GaAsP Photodiodes.350 - 680nm. Peak at 640 nm
Sensitivity	1 mV/10 $\mu\text{mol} / \text{m}^2 / \text{s}$ (V version)
Temperature Sensitivity	$\pm 0.15\%$ C at peak response, from 0 - 50° C
Linearity	1% over 0 - 2000 $\mu\text{mol} / \text{m}^2 / \text{s}$
Uniformity of Sensing Surface	Better than 2% over 0.85 sensing length
Response Time	2 μs . 10 - 90%
Output	
V version (Voltage Version)	200mV / 2,000 $\mu\text{mol} / \text{m}^2 / \text{s}$
A version (Current Version)	$\sim 1.8 \mu\text{A}$ / 2,000 $\mu\text{mol} / \text{m}^2 / \text{s}$
Operating Temperature Range	-20° C - +50° C.
Cable Connections	Blue.....0 Clear.....+ Screen. Uncoated wire connected to plastic screen
Dimensions	1.2 cm x 1.5 cm x 1m
Materials	Anodised aluminium and acrylic



Comparative response of the LINPAR to radiation compared to the ideal PAR response.



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