

Delta-T Devices - Light Sensors

Three types of sealed photodiode sensors are now available:

- A photosynthetically active radiation PAR sensor (the QS2)
- A solar energy flux sensor (the ES2)
- A range of three UV sensors (the UV3pA, UV3pB, & UV3pAB)

These sensors replace the previous Delta-T models offered.

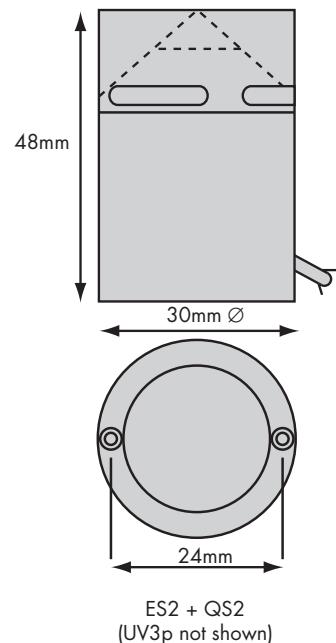
- **mV outputs pre-set to identical standard values for each sensor type**
- **Self-cleaning, stay-dry diffuser with water drainage slots**
- **Good cosine response with infinity error correction ring**
- **Quality photodiodes – high stability with low temperature coefficient**
- **Hard-anodised aluminium body**
- **Lower purchase and recalibration cost**

The UV sensors are fitted with a transimpedance amplifier operating from a single rail power supply.

All sensors can be provided with an optional aluminium mounting plate (type SRLF1) which includes a bubble level, and levelling adjusters. Alternatively a levelling plate is available for standard Delta-T weather station masts (takes 2 ES2 or QS2 or 1 E/QS2 and 1 UV3p).

Type	ES2	QS2	UV3pA	UV3pB	UV3pAB
Spectral region	Solar Energy	PAR	UV "A"	UV "B"	UV "AB"
Spectral response	400–1050 nm	400–700 nm			
Peak wavelength			373 ±2nm	313 ±2nm	360 ±5nm
Bandwidth			31 ±2nm	26 ±2nm	72 ±5nm
Relative spectral response	Standard graph for all sensors		Individual spectral response for each sensor		
Output sensitivity	10 mV per kW m ⁻² of total solar radiation	10 mV per mmol m ⁻² s ⁻¹		1 mV per W m ⁻²	
Accuracy (error) at 20°C traceable to NPL & BSI stds	±3%*	±5%		±7.5%	
Measuring range	0–2 kW.m ⁻²	0–3 mmol m ⁻² s	0–150 W m ⁻²	0–150 W m ⁻²	0–200 W m ⁻²
Cosine corrected	within ±5% up to 70° incidence		within ±5% up to 70° incidence		
Voltage supply	n/a		7–15 V dc (<12mA)		
Size (mm)	48 high x 30 dia		48 high x 50 dia (base)		

* Calibrated under a spectro-radiometrically controlled Lambertian Source.



ES2 + QS2
(UV3p not shown)

Further Information

Data sheets and in some cases technical notes and academic papers, are available on all the instruments mentioned in this Product News brochure. If you have any questions about the instruments or their applications, please let us know and we'll do our best to help.

Technical Support

We have recently re-organised our technical support function. If you require technical support on any of our products please contact us (preferably by e-mail: tech.support@delta-t.co.uk). You will immediately be issued with a Technical Support reference number, and we will then endeavour to answer your query as rapidly as possible.

Overseas Representation

Delta-T has an extensive network of representatives to serve customers outside the UK. In these countries, all sales and technical enquiries should be directed to our representatives; details are available.

Delta-T Devices Ltd

128 Low Road, Burwell, Cambridge, CB5 0EJ, England
Telephone: (01638) 742922 (international +44 1638 742922)
Fax: (01638) 743155 ((international +44 1638 743155)
E mail: sales@delta-t.co.uk
Website: www.delta-t.co.uk