

ELECTROCORDER

Model: **SR-1R**

PV Logger



RS232

IP65

NEMA
12/4

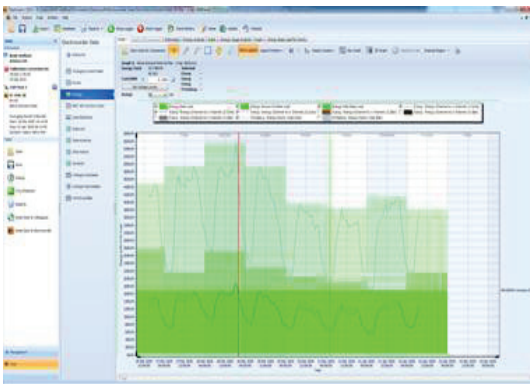
Single channel, 0-1500W/m², model dependent.

Constant sampling technique; misses very little data

Complete with Electrosoft analysis software

Sealed to IP65/NEMA 12/4

SR-1R



- Enables users to conduct site or installation surveys.
- Records Solar Irradiance up to 1500W/m².
- One input channel.
- Records minimum, average and maximum solar Irradiance.
- Data stored in non-volatile memory.
- Free software, Electrosoft.
- Recorded data is uploaded to a PC for analysis with Electrosoft.
- Memory capacity of 32,000 (10 bit, TRMS) values, up to 300 days continuous recording.
- Selectable averaging period to suit each situation, accurate to $\pm 5\%$ of reading.
- Kit includes Logger, Electrosoft, Serial Lead, Pyranometer & Plug in mains 12Vdc PSU.
- Model available:-
SR-1R-IP65

ELECTROCORDER

Model: SR-1R

The SR-1R is designed to allow users to monitor and record Solar Irradiance over a prolonged period. The SR-1R is widely used for site surveys, either for proposed Solar Energy installations or to assess existing systems.

Setting up the ElectroCorder is easy, suitable for non-technical users. Using the supplied Windows software, Electrosoft; input the location details for the logging and choose the logging period. Electrosoft will print the necessary dispatch / return documentation including user instructions. All data is included in a database of dispatches and returns, allowing you to track location of multiple loggers.

Why is the ElectroCorder better than other similarly priced competitors? The ElectroCorder range use a constant sampling technique, unlike the single reading of competitors.

When the loggers start to record, they sample every channel 16 times every 20ms. At the end of each averaging period, 3 quantities are saved for each channel, the True RMS average, the Maximum, which is the highest value during the period and the Minimum. This means that it will record all the peaks and troughs which are one 20ms or longer.

Electrocorder will start recording when the green start button is pressed and stop recording when the memory is full. Recording is shown by a flashing green light and completion by a red light.

The solar irradiance levels are stored with dates and times. With the back-up battery, the ElectroCorder can continue to record for about a week on battery power alone and indefinitely with the 12V PSU.

The stored data is uploaded to a PC via the supplied RS232 cable. Using Electrosoft, the recorded solar irradiance levels, dates & times can be viewed in both tabular and graphical form, exported to a spreadsheet or saved to file.

Graphs can be printed showing the recorded levels and the allowable tolerance bands. Electrosoft also provides an internal database which effectively manages the distribution of multiple units.

This model is specifically designed to monitor one solar irradiance channel. Allowing you to monitor the irradiance at a given site. There are many models of ElectroCorder, to suit many logging situations and user's requirements.

TECHNICAL SPECIFICATIONS (subject to change without notice)

Recorded values	Records Minimum, Average & Maximum Irradiance..
Pyranometer Input socket type	2.5mm stereo jack.
Minimum and maximum time resolution	Always 20ms.
Supplied Pyranometer sensor accuracy	+/-2% of range.
Measurement range	0-1500Wm ²
Irradiance measurement accuracy	Typically 5% of range.
Sampling frequency	1.25ms.
Data recorded	Average, max & min irradiance values during the averaging period.
Memory capacity	64kB able to record 32,000 irradiance levels.
Memory type	Non-volatile SEEPR0M.
Memory - averaging period & duration	1 sec to 60 mins (1 sec gives 2 hrs logging, 60 min gives 300 days logging).
Real-time clock accuracy	Greater than 0.001%.
Input Lead Length	Metric 5m, Imperial/ English 16' (feet).
Battery life while logging	Unlimited – 12Vdc PSU option & battery backup or 7 days on battery power only.
Battery Type	Unit contains one 9V Alkaline batteries (E-Block, PP3, 1604A).
Communications Interface type	RS232 Serial.
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F
Dimensions & Weight	Metric 100 x 85 x 65mm & 300g or English/Imperial 4" x 3" x 2.5"; 11 oz

WARRANTY & CALIBRATION - All Acksen Ltd products carry a minimum of a one year's back to base warranty covering manufacturing defects and component failures. Each unit is individually calibrated during testing.

CONFORMITY - Emissions EN55022:1994B, (EN50081-1:1992).Immunity EN50082-2:1995, following the provisions of EMC directive 89/336/EEC. Recording std EN50160:1994. LVD 72/23/EEC with respect to EN60065. (IEC-61010). All models certified (light industrial, 3V/m).

ORDERING - SR-1R-IP65-KIT – inc. software, serial lead, pyranometer & user guide.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.