

Single Phase Waterproof Voltage Logger

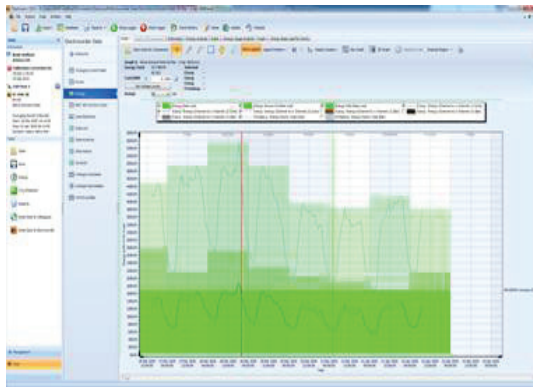
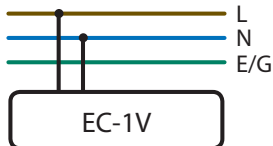
1Ø

1V

300V

IP65

NEMA 12/4



Single Phase 300Vac (Live/Hot to Neutral)

Constant Sampling technique; misses very little data

Complete with Electrosoft energy analysis software

Sealed to IP65/NEMA 12/4 as standard



- Voltage recorder enables real voltage problems to be highlighted quickly for further investigation.
- Allow engineers to quickly and cost effectively monitor & resolve possible supply problems.
- Small, safe & easy to use.
- Records average voltage, max & min with date & time & stores information in non volatile memory.
- Windows based software, Electrosoft.
- Kit includes Logger, Carry Case, Electrosoft software, & RS-232 serial lead.
- Recorded data is uploaded to a PC for analysis with supplied free software.
- Electrosoft includes internal database to ensure effective management of distributed units.
- Selectable measurement resolution to suit each situation, accurate to $\pm 1\%$ of reading + 1 Volt (90 - 260Vac).
- Order code:-
EC-1V-IP65-50-KIT (50Hz)
EC-1V-IP65-60-KIT (60Hz)

ELECTROCORDER

Model: EC-1V

The ElectroCorder range is designed to allow users to cost effectively monitor their voltage supply, the ElectroCorder enables real voltage problems to be highlighted quickly for further investigation using traditional recorders. The EC-1V is widely used for Voltage optimisation justification, used for pre and post installation analysis.

Setting up the ElectroCorder is easy, suitable for non-technical staff. Using the supplied Windows software, Electrosoft; the customer's name and address are input to the unit's memory and stored. Electrosoft will print the necessary dispatch / return documentation including customer instructions. All data is included in a database of dispatches and returns.

Memory modes available: The ElectroCorder can be set to start recording when it is plugged in and stop recording when the memory is full. The ElectroCorder is housed in a case with standard domestic plug pins, it can be plugged into any socket (outlet) by the customer. Recording is shown by a red light and completion by a green light. The Waterproof model EC-1VIP65 is in a waterproof case, sealed to IP65.

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 per cycle, a cycle is 16ms at 60Hz and 20ms at 50Hz. At the end of each averaging period, 3 quantities are saved for each channel, the True RMS average, the Max, which is the highest cycle value during the period and the Min, lowest cycle value. This means that it will record all the peaks and troughs which are one cycle or longer.

When recording the ElectroCorder will store the average voltage over the period chosen (1 sec to 60 min), it will also record the highest (max) & lowest (min) cycle values during that period.

When the unit has been returned to the power company, the stored data is uploaded to a PC via the supplied RS-232 cable. Using Electrosoft, the recorded voltage 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. These results may then be discussed with the customer. Electrosoft also provides an internal database which effectively manages the distribution of multiple units.

The ElectroCorder records voltage levels, shown by a flashing green light on the unit. A red light advises the customer the unit has completed recording. When finished the customer unplugs it and returns it to you in the reusable mailing case. Upload the data from the ElectroCorder and analyse it using Electrosoft. From this you can generate a report on the results and discuss with your customer what further action is needed.

There are many models of ElectroCorders, single and three phase, voltage, current and both voltage and current.





TECHNICAL SPECIFICATIONS (subject to change without notice)

Measurement range	30V to 300Vac measurement between live/hot to neutral, no measurements to earth/ground are taken
Measurement accuracy	±1% of reading + 1 Volt (within 90 - 260Vac); ±3% below 90Vac
V _{max} & V _{min} measurement resolution	Always one cycle (50/60 Hz), independent of averaging period set
Sampling frequency	16 samples per cycle (1920Hz (60Hz) / 1600Hz (50Hz))
Data recorded	Average, max & min voltage-cycle-value during the averaging period (live/hot to neutral only)
Memory capacity	32,000 Voltage levels (64kB)
Memory type	Non-volatile SEEPR0M
Memory endurance	100,000 - 1,000,000 read/write cycles
Real-time clock accuracy	Greater than 0.001%
Recording averaging period (user selectable)	1 sec to 60 mins (1sec gives 2 hrs logging, 60 min gives 300 days logging)
Battery life (while plugged in)	Unlimited - mains powered & battery backup (7000 hours, 8 months while unplugged)
Interface type	RS-232 serial
Electrosoft Software	Windows (2K, ME, NT, Vista, Windows 7); 1024 x 768 min resolution
Environmental (temp & sealing/protection)	14°F to 104°F or -10°C to +40°C Model EC-1V-IP65 is Sealed to IP65, NEMA 12/4
Dimensions & Weight	Metric 100 x 85 x 65mm & 11 oz or 300g or English/Imperial 4" x 3" x 2.5"
Recording Standard	EN50160: 1994

WARRANTY & CALIBRATION - All Acksen products carry a minimum of a one year 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 - ElectroCorder KIT - includes logger, Electrosoft, carry case, user guide, RS-232 cable.

	PLUG STD	COUNTRY	ENVIRONMENTAL SEALING	ORDER CODE
	AS3112, NZ SS 198-1967	Australia, New Zealand	IP65, NEMA 12/4	EC-1V-IP65-ANZ-**-KIT
	CEE 7/16	Europe	IP65, NEMA 12/4	EC-1V-IP65-EU-**-KIT
	NEMA 5-15	North America	IP65, NEMA 12/4	EC-1V-IP65-NA-**-KIT
	BS 1363	United Kingdom & Ireland etc.	IP65, NEMA 12/4	EC-1V-IP65-UKL-**-KIT
Reuseable Mailing Case - ECMC01		RS-232 Serial Lead - EC SL/model number		

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