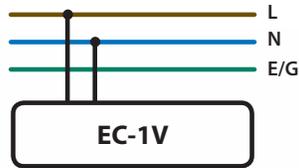


# Electrocorder

Model:  
EC-1V



Single phase 300Vac (Live/Hot to Neutral)

Complete with Electrosoft energy analysis software

Sealed to IP65/NEMA 12/4

Small, safe & easy to use voltage recorder enables voltage issues to be highlighted quickly for further investigation.

Data stored in non-volatile memory.

Memory capacity of 32,000 (True RMS) values per channel (10bit), up to 300 days continuous recording.

Selectable averaging period from 1 second to 60 minutes.

Voltage accurate to  $\pm 1\%$  of reading + 1 Volt (90 - 260Vac).

Kit includes data logger, voltage lead, RS-232 serial lead, Electrosoft software and carry case.



The advantage of ElectroCorder products over most others is that our Data Loggers constantly sample information (recording the Minimum, Maximum and Average reading) over the set period. Many other products only take 'snap shots' of what is going on and can miss 99.9% of the data that is critical to your analysis.

The EC-1V is designed to allow users to cost effectively monitor their voltage issues and is widely used for voltage optimisation (stabilisation) justification, used for pre and post installation analysis.

Setting up the Electrorecorder is easy, suitable for non-technical staff. Using the supplied (free) 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 the location of multiple loggers.

Why is the Electrorecorder better than other similarly priced competitors? The Electrorecorder range uses 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. 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, the lowest cycle value. This means that it will record all the peaks and troughs which are one cycle or longer.

**Technical specifications (subject to change without notice)**

Measurement Range	30V to 300Vac measurement is 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 <sub>max</sub> & V <sub>min</sub> Measurement Resolution	Always one cycle (60 Hz), independent of averaging period set
Sampling Frequency	16 samples per cycle (960Hz (60Hz)
Data Recorded	Average voltage, 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 SEEPROM
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 - 60 min (1 sec = 2 hrs, 60 min = 300 days recording) - IP65, NEMA 12/4
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)	-10C to +40C or +14°F to +104°F, Sealed to IP65
Dimensions & Weight	4" x 3" x 2.5"
Recording Standard	EN50160: 1994

The voltage levels are stored with dates and times. With the back-up battery, the Electrorecorder can continue to record for up to a year.

The recorded data is uploaded to a PC via the supplied RS-232 cable. Using Electrosoft, the recorded voltage levels with dates and 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.

On the logger, recording is signified by a flashing green light. A red light advises users that the unit has completed recording.

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**Warranty & Calibration**

All Accsense Electrorecorder products carry a \*Lifetime back to base warranty covering manufacturing defects and component failures. Each unit is individually calibrated during testing.

\*Refer to website for full terms and conditions.

**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).