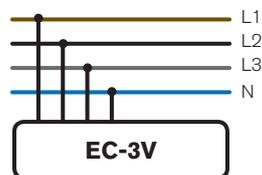


## Electrocorder Model: EC-3V

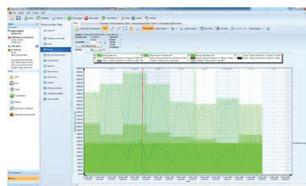


**Three phase 500Vac**

**Integral phase sequence  
or rotation checker**

**Complete with Electrosoft  
energy analysis software**

**Sealed to IP43 as  
standard, available as  
IP65/NEMA 12/4**



Allows engineers to quickly and cost effectively monitor & resolve single & 3 phase voltage problems

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,  $\pm 1$  volt

Kit includes data logger, voltage input leads, USB lead, Electro-soft software and a carry case

The advantage of the 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.

## acksen > Electrorecorder Model: EC-3V

The EC-3V is designed to allow electrical engineers to cost effectively monitor single and three phase supplies. Our products allow voltage problems to be highlighted quickly and investigated.

Setting up the Electrorecorder EC-3V 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 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.

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 USB lead. Using Electrosoft, the recorded voltage levels, with dates and times that 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.

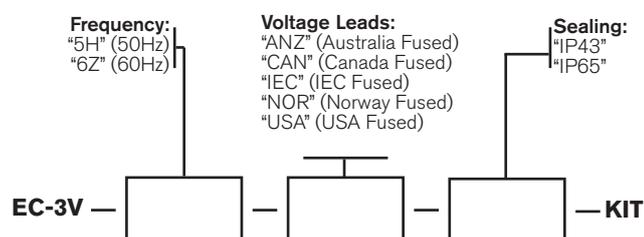
A smaller version of the EC-3V is available (SL-3V), however the SL-3V product does not include the phase rotation checker. Please specify colour requirement for voltage leads at time of ordering.

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

Measurement range (Vrms)	0Vac to 500Vrms (Ph – Ph) or 0Vac to 300Vrms (Ph – N)
Maximum channel input voltage	500Vrms (Ph – Ph), 300Vrms (Ph – N) or 700Vpeak
Inputs (non-isolated inputs)	Three phase inputs (L1, L2 & L3) & Neutral (N), Non-isolated input channels
Input socket types	4mm shrouded 'banana' plugs & sockets, each with insulated crocodile clip
Measurement accuracy	±1% of reading ±1 Volt, 90Vac - 450Vrms (ph – ph); else ±3%. (50/60Hz ±2%)
V <sub>min</sub> & V <sub>max</sub> measurement time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Sampling frequency	16 samples per cycle 800Hz @ 50Hz or 960Hz @ 60Hz
Data recorded	Average voltage, max & min voltage-cycle-value during the averaging period
Memory capacity	192kB able to record 32,000 Voltage levels per phase
Memory type	Non-volatile SEEPROM
Memory - averaging period & duration	1 sec to 60 min (1 sec gives 2 hrs logging, 60 min gives 300 days logging)
Real-time clock accuracy	Greater than 0.001%
Input lead length	Metric 2.0 metres; Imperial/English 6' 6"(6 feet, 6 inches)
Battery life (while plugged in)	Unlimited - mains powered & battery backup (9,000 hours, 1 year while unpowered)
Battery type	Unit contains three 9V Alkaline batteries (E-Block, PP3, 1604A)
Communications interface type	USB, optically isolated to 5,2kV
Electrosoft software	Windows (9x, 2K, ME, NT, XP, Vista & Windows 7); 1024 x 768 min resolution
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F. Sealed to IP43 (Optional IP65, NEMA 12/4)
Dimensions & weight	Metric 250 x 175 x 70mm & 500g Imperial/English - 10" x 6" x 3" & 1lb
Standards	Recording - EN50160: 1994 - CAT III, maximum input voltage 600Vac

### Determining product order codes:

To specify your Electrorecorder select various codes and enter into the boxes in order to create an accurate product code. For example: EC-3V-5H-IEC-IP43-KIT.



### Warranty & calibration

Acksen Ltd 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).