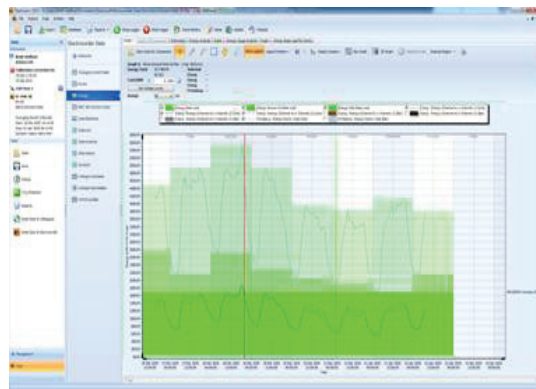
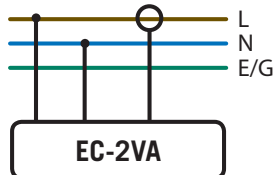


ELECTROCORDER

Model: **EC-2VA**

Three Phase Voltage & Current Logger



- Enables voltage and load problems to be highlighted for further investigation.
- Allows engineers to monitor & resolve single-phase voltage and current.
- One Voltage input (L1), one Current input (A1).
- Voltage channels record V_{Avg} , V_{Max} & V_{Min} .
- Data stored in non-volatile memory.
- Free software, Electrosoft.
- Recorded data is uploaded via USB to a PC for analysis with Electrosoft.

One voltage channel 300Vac, One current channel 500Aac

Constant Sampling technique; misses very little data

Complete with Electrosoft energy analysis software

Available as IP65/NEMA 12/4



- Kit includes Logger, Carry Case, Electrosoft, voltage lead, 300A current sensor & serial lead.
- Memory capacity of 32,000 (true RMS) values per channel (10bit), up to 300 days continuous recording.
- Selectable averaging period to suit each situation, accurate to $\pm 2\%$ of reading.
- Order code:-
EC-2VA-50-KIT (50Hz)
EC-2VA-60-KIT (60Hz)

ELECTROCORDER

Model: EC-2VA

The ElectroCorder range is designed to allow electrical distribution companies to cost effectively monitor single and three phase supplies. Our products allow voltage problems to be highlighted quickly for further investigation. The EC-2VA is designed to allow engineering staff to monitor single phase voltage and current.

Setting up the ElectroCorder EC-2VA is easy, suitable for semi-technical staff. Using the supplied (free) Windows software, Electrosoft; the location's details are input to the unit's memory and stored. Electrosoft will then print documentation allowing users to record and/or pass on delivery instructions to colleagues. All data is also stored in a database of dispatches and returns, which tracks the whereabouts of all units.

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.

The voltage and current levels are stored with dates and times. With the backup battery, the ElectroCorder can continue to record for a year. On the logger, recording is signified by a flashing red light. A green light advises users that the unit has completed recording.

When the logger 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 and current 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.

This model is specifically designed to monitor one voltage channel and one current. Allowing you to monitor the main voltage supply and the load current, therefore enabling staff to determine whether a voltage problem is load related or not.

There are many models of ElectroCorder, to suit many logging situations and user's requirements.

TECHNICAL SPECIFICATIONS (subject to change without notice)

Measurement range (Vrms)	0Vac to 300Vrms
Maximum channel input voltage	300Vrms
Voltage Input	One voltage input (L1)
Voltage measurement accuracy	±2% of reading (10 bit) within 90Vac - 300Vrms otherwise ±3%. (50/60Hz ±2%)
V _{min} , V _{max} , I _{max} & I _{min} time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Current measurement range (Irms)	0 – 300A Rogowski, other ranges can be factory set
V _{max} , V _{min} , I _{max} & I _{min} time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Current measurement range (Irms)	TK is 5A – 300A, 1K is 10A – 1kA, 2K is 15A – 2kA, 3K is 20A – 3kA
Current Input	One current input (A1)
Current measurement accuracy	2% of range, typically
Current sensor dimensions	Diameter when closed – 145mm or 6"
Sampling frequency (all channels)	16 samples per cycle 800Hz @ 50Hz or 960Hz @ 60Hz
Data recorded	Average, max & min voltage & current values during the averaging period
Memory capacity	192kB able to record 32,000 Voltage & Current levels per channel.
Memory type	Non-volatile EEPROM
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 2 metres Imperial/English 6' 6" (6 feet, 6 inches)
Battery life (while plugged in)	Unlimited – While unplugged battery life is typically 9,000 hours/1 year
Battery Type	Unit contains one 9V Alkaline battery (E-Block, PP3, 1604A)
Communications Interface type	RS-232 serial, baud of 19,200, optically isolated to 5,2kV
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F – IP65, NEMA 4X
Dimensions & Weight	Metric 145 x 90 x 45mm & 500g Imperial/English – 5.5" x 3.5" x 3" & 1lb
Standards	Recording - EN50160: 1994 - CAT III, maximum input voltage 300Vac rms

WARRANTY & CALIBRATION - All Ackson Ltd products carry a minimum of a one year's 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 - EC-2VA-**-KIT – inc. software, serial lead, input leads, 500A transducer & user guide.

	Description	ENVIRONMENTAL SEALING	ORDER CODE
1	KIT inc. items 2-5 EC-2VA-** (50 or 60 for 50/60Hz)	Protected or indoor only	EC-2VA-**-KIT
2	Replacement – Logger Unit -** (50 or 60 for 50Hz or 60Hz)	Protected or indoor only	EC-2VA-**-LOG
3	Replacement - Serial Lead	Protected or indoor only	EC-2VA-SL1
4	Replacement – Batteries (1 per unit)	Internal to logger	EC-2VA-BAT
5	Replacement TI-Flex Rogowski Coil	Protected or indoor only	EC-RC-001

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