



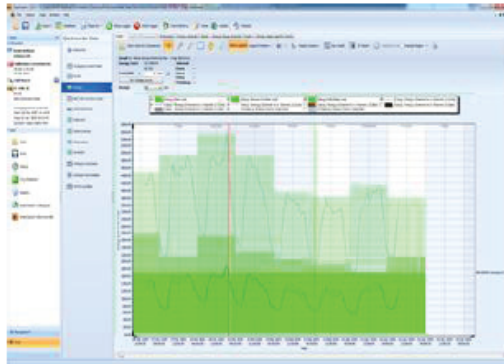
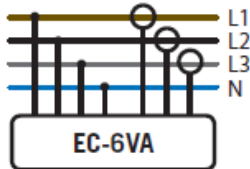
## ELECTROCORDER

### Model: EC-6VA

### Three Phase Voltage & Current Logger

3Ø
3V
3A
500V
IP43
 $\epsilon_{Rog}$

IP65/  
NEMA 12/4  
available



Three voltage channels 500Vac, Three current channels 300A, 1kA, 2kA or 3kAac

Constant Sampling technique; misses very little data

Complete with Electrosoft energy analysis software

Available as IP65/NEMA 12/4



- Records voltage current, Power and Energy.
- Records voltage up to 500Vac & loads up to 3kAac, model dependent.
- Three voltage input channels (L1, L2, & L3), 0-500V & Neutral(N).
- Voltage channels record  $V_{Avg}$ ,  $V_{Max}$  &  $V_{Min}$  on all 3 channels. Data stored in non-volatile memory.
- Three current channels (A1, A2 & A3) 300A, 1kA, 2kA & 3kA model dependent.
- Three current channels record  $I_{Avg}$ ,  $I_{Max}$  &  $I_{Min}$  on all 3 channels. Data stored in non-volatile memory.
- Memory capacity of 32,000 (true RMS) values per channel (10bit), up to 300 days continuous recording.
- Recorded data is uploaded via USB to a PC for analysis with Electrosoft.
- Kit includes Logger, Carry Case, Electrosoft, 3 current transducers, 4 unfused voltage leads & USB lead.
- Selectable averaging period to suit each situation, from 1 second to 60 minutes.
- Four models available:-  
EC-6VA-TK (300A range)  
EC-6VA-1K (1kA range)  
EC-6VA-2K (2kA range)  
EC-6VA-3K (3kA range)
- Order code:-  
EC-6VA-xK-50-KIT (50Hz)  
EC-6VA-xK-60-KIT (60Hz)
- IP65 or NEMA 12/4 Order:-  
EC-6VA-xK-50-IP65-KIT (50Hz)  
EC-6VA-xK-60-IP65-KIT (60Hz)



## ELECTRORECORDER

## Model: EC-6VA

The Electrorecorder range is designed to allow electrical distribution companies to cost effectively monitor single and three phase loads. This product will allow voltage and load problems to be highlighted quickly for further investigation.

Setting up the Electrorecorder EC-6VA 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 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 and current levels are stored with dates and times. With the back-up battery, the Electrorecorder can continue to record for months.

The stored data is uploaded to a PC via the supplied USB cable. Using Electrosoft, the recorded 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.

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

This model is specifically designed to monitor one, two or three current channels, as well as one, two or three voltage channels. Allowing you to monitor the loading and energy consumption of the installation. There are many models of Electrorecorder, to suit many logging situations and user's requirements.

The product is supplied with three Rogowski transducers and four unfused voltage leads. The EC-6VA-TK has a range of 5 – 300A, EC-6VA-1K has a range of 10 – 1k A, the EC-6VA-2K measures from 15 to 2kA and the EC-6VA-3K measures from 20 to 3kA. Other ranges may be factory set.

### TECHNICAL SPECIFICATIONS (subject to change without notice)

Recorded values	$V_{avg}$ , $V_{max}$ and $V_{min}$ on 3 channels and $I_{avg}$ , $I_{max}$ & $I_{min}$ on 3 channels
Voltage Measurement range (Vrms)	0Vac to 500Vrms (Ph – Ph) or 0V to 300Vrms (Ph – N)
Measurement accuracy	±1% of reading, ±1 Volt. (10 bit) within 100Vac-450Vrms (ph-ph); else ±3%. (50/60Hz ±2%)
Maximum channel input voltage	500Vrms (Ph – Ph), 350Vrms (Ph – N) or 850Vpeak
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
$V_{max}$ , $V_{min}$ , $I_{max}$ & $I_{min}$ time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Current measurement range (I rms)	TK is 5A – 300A, 1K is 10A – 1kA, 2K is 15A – 2kA, 3K is 20A – 3kA
Supplied current sensor accuracy	Typically +/-3% of reading
Current measurement accuracy	Typically 2% of reading
Current Input socket types (all channels)	Hard-wired through cable glands
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	384kB able to record 32,000 values per channel/phase
Memory type	Non-volatile EEPROM
Memory - averaging period & duration	1 sec to 60 mins (1 sec gives 2 hrs logging, 60 min gives up to 300 days logging)
Real-time clock accuracy	Greater than 0.001%
Current Sensor Input Lead Length	<b>Metric</b> 2 metres <b>Imperial/English</b> 6' 6" (6 feet, 6 inches)
Input Voltage Lead Length	<b>Metric</b> 2 metres <b>Imperial/English</b> 6' 6" (6 feet, 6 inches)
Battery life while logging	Unlimited when connected to voltage
Battery Type	Unit contains four 9V Alkaline batteries (E-Block, PP3, 1604A)
Communications Interface type	USB, optically isolated to 5,2kV
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F – OPTIONAL - IP65, NEMA 12/4
Dimensions & Weight	<b>Metric</b> 260 x 180 x 190mm & 2kg <b>Imperial/English</b> - 10" x 7" x 8" & 4lb
Standards	Recording - EN50160:1994 - CAT III

**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-6VA-xK-xx-KIT – Inc. case, software, USB lead, input voltage leads, current transducer & user guide.

	Description	ENVIRONMENTAL SEALING	ORDER CODE
1	Normal KIT EC-6VA-xK-xx (50 or 60Hz)	IP43, indoor use only	EC-6VA-xK-xx-KIT
2	IP65/NEMA 12/4 KIT EC-6VA-xK-xx (50 or 60Hz)	IP65/NEMA 12/4	EC-6VA-xK-xx-IP65-KIT
3	Replacement – Logger EC-6VA-xK-xx (50 or 60Hz)	IP43, indoor use only	EC-6VA-xK-xx
4	Replacement – Logger EC-6VA-xK-xx-IP65 (50 or 60Hz)	IP65/NEMA 12/4	EC-6VA-xK-xx-IP65
5	Replacement - Carry Case	IP43, indoor use only	EC-6VA-CC1
6	Replacement - USB Lead	IP43, indoor use only	EC-6VA-USB01
7	Replacement – Batteries (4 per unit)	Internal to logger	EC-6VA-BAT



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.