



ELECTROCORDER

Model: EC-1A

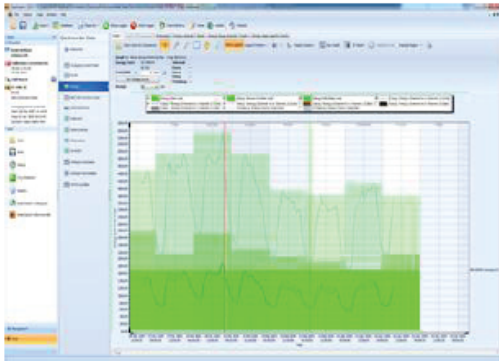
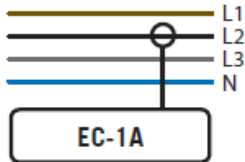
AC Current Logger







NEMA 12/4



Single channel (A1), various ranges, 0.1A to 10kA

Constant Sampling technique; misses very little data

Complete with Electrosoft energy analysis software

Sealed to IP65/NEMA 12/4



- Enables current and load problems to be highlighted for further investigation.
- Allows users to record load currents up to 10kAac, range is model dependent.
- One input channel, A1.
- Record I_{Avg} , I_{Max} & I_{Min} . Data stored in non-volatile memory.
- Free software, Electrosoft.
- Recorded data is uploaded to a PC for analysis with Electrosoft.
- 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.
- Kit includes Logger, Carry Case, Electrosoft, USB lead, 'Current Transducer', & Plug in mains 12Vdc PSU.
- Various models available:-
 - EC-1A-10A (0.1 – 10A)
 - EC-1A-50A (0.5 – 50A)
 - EC-1A-100A (1 – 100A)
 - EC-1A-1K (10 – 1kA)
 - EC-1A-2K (20 – 2kA)
 - EC-1A-3K (30 – 3kA)
 - EC-1A-5K (50 – 5kA)
 - EC-1A-10K (100 – 10kA)
- Order code:-
 - EC-1A-**-50-KIT (50Hz)
 - EC-1A-**-60-KIT (60Hz)



ELECTROCORDER

Model: EC-1A

The ElectroCorder range is designed to allow electrical distribution companies to cost effectively monitor current loads. This product will allow load problems to be highlighted quickly for further investigation.

Setting up the ElectroCorder EC-1A 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.

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

The current levels are stored with dates and times. With the back-up battery, the ElectroCorder can continue to record for 3 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. Allowing you to monitor the loading and energy consumption of the installation. There are many models of ElectroCorder, to suit many logging situations and user's requirements.

The product is supplied with one Rogowski transducer. Several models are available, the standard EC-1A and has a range of 10 – 1,000 A. Other ranges may be factory set.

TECHNICAL SPECIFICATIONS (subject to change without notice)

Recorded values	I_{avg} , I_{max} & I_{min} on 1 channel.
Current Input socket types (all channels)	Hard-wired through cable glands.
I_{max} & I_{min} time resolution	Always one cycle (50/60 Hz), independent of selected averaging period.
Supplied current sensor accuracy	+/-2% of range.
Current measurement range (Irms)	Model dependent, standard model is EC-1A is 10A – 1kA.
Current measurement accuracy	2% of range, typically.
Sampling frequency (all channels)	16 samples per cycle 800Hz @ 50Hz or 960Hz @ 60Hz.
Data recorded	Average, max & min current values during the averaging period.
Memory capacity	64kB able to record 32,000 current levels 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 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 logging	Unlimited – 12Vdc PSU option & battery backup or 1 month on battery power only.
Battery Type	Unit contains five 9V Alkaline batteries (E-Block, PP3, 1604A).
Communications Interface type	USB, baud of 19,200, optically isolated to 5,2kV.
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F – IP65, NEMA 12/4.
Dimensions & Weight	Metric 250 x 175 x 70mm & 1kg; Imperial/English - 10" x 6" x 3" & 2.2lbs.
Standards	Recording - EN50160: 1994 - CAT III.

WARRANTY & CALIBRATION - All Acksen 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-1A-KIT-**- inc. software, serial lead, input leads, current transducer & user guide.

	Description	ENVIRONMENTAL SEALING	ORDER CODE
1	KIT incs. items 2-6 EC-1A-**- (50 or 60 for 50/60Hz)	IP65	EC-1A-K-**-KIT
2	Replacement – Logger (includes. 1 x item 4) (50 or 60 for 50Hz or 60Hz)	IP65	EC-1A-K-**-LOG
3	Replacement – USB Lead	IP65	EC-USBL-01
4	Replacement Rogowski Current Transducer	IP65	EC-FLEX-500
5	Replacement – Batteries (5 per unit)	Internal to logger	EC-1A-BAT
6	Plug-in mains 12Vdc PSU	None	EC-1A-12VPSU



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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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.