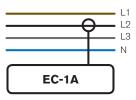


Electrocorder Model: EC-1A





Single channel (A1), various ranges, 4Aac to 3kAac

Complete with Electrosoft energy analysis software

Sealed to IP65/NEMA 12/4 as standard



Enables current and load problems to be highlighted 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

Accurate to ±2% of range, typically

Kit includes data logger, Rogoswski Coil, USB lead, 12Vdc PSU, Electrosoft software and a carry case



The advantage of the Electrocorder products over most others is that our Data Loggers <u>constantly sample information</u> (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.

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The EC-1A is specifically designed to monitor one, current channel, allowing you to monitor the loading and/or balancing problems and energy consumption of an installation.

Setting up the Electrocorder EC-1A 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 location of multiple loggers.

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 current levels are stored with dates and times. With the backup battery, the Electrocorder can continue to record for months.

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

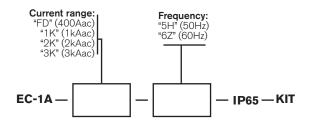
Four models are available, the EC-1A-FD has a current range up to 400Aac, EC-1A-1K range up to 1kAac, EC-1A-2K range up to 2kAac, EC-1A-3K range up to 3kAac. Other ranges may be factory set. For smaller current ranges consider the CT-1A.

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.
$\mathbf{I}_{\max} \& \mathbf{I}_{\min}$ time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Current measurement range (Irms)	Model dependent, standard model is EC-1A-1K is 10Aac - 1kAac
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 SEEPROM
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. Sealed to 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

Determining product order codes:

To specify your Electrocorder select various codes and enter into the boxes in order to create an accurate product code. For example: EC-1A-FD-5H-IP65-KIT.



Warranty & calibration

All Acksen Ltd products carry lifetime* back to base warranty covering manufacturing defects and component failures. Each unit is individually calibrated during testing. (* Refer to website).

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).