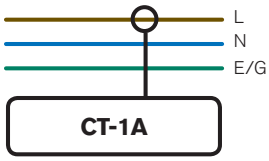
Electrocorder Model: CT-1A

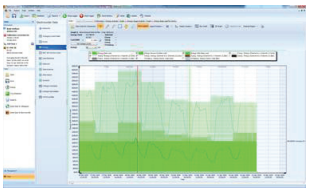


1A | CT | IP65 | NEMA 12/4

Single channel current, 0.1Aac to 100Aac, model dependent

Complete with Electrosoft energy analysis software

Sealed to IP65/NEMA 12/4 as standard



Enables users to record for energy audits in homes, offices and businesses and earth fault logging in industry

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, current transformer, USB lead, Electrosoft software, carry case and plug in mains 12Vdc power supply

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.

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Powerfully Measured

Version 3.01.02.14

The CT-1A is specifically designed to monitor one current channel, allowing you to monitor the loading and energy consumption of the installation range it is widely used for energy audits in homes, offices and businesses and earth fault logging in industry.

Setting up the Electrocorder CT-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 back-up battery, the Electrocorder can continue to record for 1 week on battery power alone and indefinitely with the 12V PSU.

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.

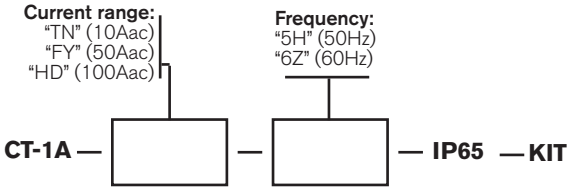
Three models are available, the CT-1A-TN has a range of 0.1Aac to 10Aac, CT-1A-FY has a range from 0.5Aac to 50Aac and CT-1A-HD has a range from1Aac to 100Aac. For higher current ranges consider the EC-1A on single phase installations or alternatively the CT-3A, or EC-3A for three phase installations.

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 gland**
I_{max} & I_{min} time resolution	**Always one cycle (50/60 Hz), independent of selected averaging period**
Current measurement range (Irms)	**0.1Aac to 10Aac, 0.5Aac to 50Aac, 1Aac to 100Aac, model dependent**
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**
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 350mm Imperial/ English 14" (inches)**
Battery life while logging	**Unlimited – 12Vdc PSU option & battery backup or 5 days on battery power only**
Battery type	**Unit contains one 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. Sealed to IP65, NEMA 12/4**
Dimensions & weight	**Metric 126 x 75 x 45mm & 300g or English/Imperial 5" x 3" x 2", 11 oz**
Standards	**Recording - EN50160: 1994**

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: CT-1A-HD-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).