

ELECTROCORDER

Model: **EC-3CT**

Single & Three Phase Current Logger

3 ϕ

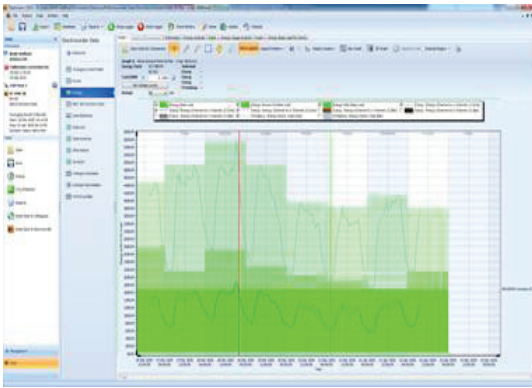
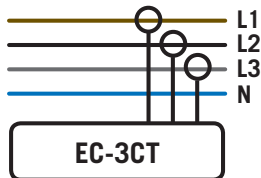
3A

600V
CAT II

IP43

CT

IP65
NEMA 12/4
available



Three phase; 30Aac, 60Aac or 300Aac (300A max input)

Constant Sampling technique, misses very little data

Complete with Electrosoft energy analysis software

Available as IP65/NEMA 12/4



- Enables current or load problems to be highlighted and investigated.
- Allows users to accurately record load currents up to 300Aac.
- Three current input channels (A1, A2, & A3).
- Records I_{Avg} , I_{Max} & I_{Min} on all 3 channels. Data stored in non-volatile memory.
- 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.
- Free software, Electrosoft.
- Kit includes Logger, Carry Case, Electrosoft software, Three CTs, USB lead & 12Vdc PSU.
- Selectable averaging period to suit each situation, accurate to <1% of range.
- Accuracy:-
 - 2-10A <5% of reading
 - 11-50A < 3% of reading
 - 51-300A <1% of reading
- Order code 300Amp model:-
 - EC-3CT-300-5H-KIT (50Hz)
 - EC-3CT-300-6H-KIT (60Hz)
- Order code 60Amp model:-
 - EC-3CT-60-5H-KIT (50Hz)
 - EC-3CT-60-6H-KIT (60Hz)

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ELECTROCORDER

Model: EC-3CT

The ElectroCorder range is designed to allow users to cost effectively monitor single and three loads. This product will allow single and 3 phase loading and/or balancing problems to be highlighted quickly as well as assessment of energy usage over time.

Setting up the ElectroCorder EC-3CT 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 can 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 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.

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

Memory modes available: The ElectroCorder can be set to start recording when it is connected and the 'start' button pressed and stop when the memory is full.

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 6 months. An external 12Vdc PSU input is available, to allow for prolonged logging without batteries. 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 green light. A steady red light advises users that the unit has completed recording. This model is specifically designed to accurately monitor one, two or three current channels. Allowing you to monitor the loading and energy consumption of the installation.

TECHNICAL SPECIFICATIONS (subject to change without notice)

Recorded values	I_{avg} , I_{max} & I_{min} on 3 channels
Current Input socket types (all channels)	4mm shrouded plugs and sockets
I_{max} & I_{min} time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Supplied current sensor output	1mVac per 0.1Aac input
Current measurement range (Irms)	~3A to 300A for 300A model, 0.5A to 60A for 60A model
Current measurement accuracy	2A – 10A < 5%, 11A – 50A < 3%, 51A – 300A < 1%
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	192kB able to record 32,000 current levels per channel/phase
Memory type	Non-volatile SEEPR0M
Memory - averaging period & duration	1 sec to 60 mins (1sec gives 2 hrs logging, 60 min gives 300 days logging)
Real-time clock accuracy	Greater than 0.001%
Current Sensor 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 3 months while unpowered
Battery Type	Unit contains fourteen 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
Dimensions & Weight	Metric 260 x 180 x 190mm & 2kg Imperial/English - 10" x 7" x 8" & 4lb
Standards	Recording - EN50160: 1994 - CAT II

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 CE certified (light industrial, 3V/m).

ORDERING - EC-3CT-300-*H-KIT or EC-3CT-60-*H-KIT – inc. carry case, software, USB lead, CTs & user guide

	Description	ENVIRONMENTAL SEALING	ORDER CODE
1	Full KIT inc. items 2-7, xxx for 60A or 300A Full KIT inc. items 2-7, xxx for 60A or 300A	IP43	EC-3CT-xxx-*H-KIT
2	Replacement Logger (excludes items 3 to 7) (xxx is 60 or 300, * is 5 or 6 for 50/60Hz)	IP43	EC-3CT-xxx-*H
3	Replacement - Carry Case	N/a	EC6-CC
4	Replacement - USB Lead	IP43	EC-USBL-01
5	Replacement Current Transducer	IP43	EC-CT97B
6	Replacement – Batteries (14 per unit)	Internal to logger	EC-9V-BATT
7	Optional Plug-in mains 12Vdc PSU	None	EC-12VPSU-UK, -EU, -NA, -ANZ

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