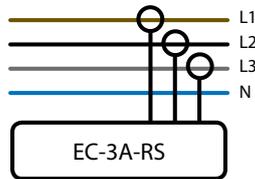


## Electrocorder Model: EC-3A-RS Dual Range

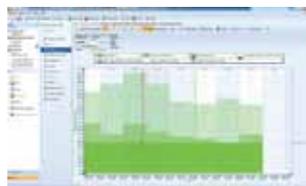


Three current channels  
c/w selectable range;  
400Aac and 3kAac ranges

Rogowski coils fit round  
140mm cables

Complete with Electrosoft  
energy analysis software

Sealed to IP65/NEMA  
12/4 as standard



Enables 3 phase loading and/or balancing problems to be highlighted quickly as well as assessment of energy usage over time

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

Accuracy:-

Typically  $\pm 2\%$  of range, within 10% - 90% of selected range, otherwise 5% of range

Kit includes data logger, Rogowski Coils, USB lead, Electrosoft software and a carry case

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.

The EC-3A-RS is specifically designed to accurately monitor one, two or three current channels allowing you to monitor the loading and/or balancing problems and energy consumption of an installation.

Electrorecorders are designed to be very cost effective allowing companies to have many, in turn allowing them to quickly deal with issues and complaints, to assess which are real problems to be further investigated, perhaps with more sophisticated data loggers. For current problems, it is normal that an Electrorecorder is sufficient!

Setting up the Electrorecorder EC-3A-RS is easy, suitable for technical and non-technical staff, using the supplied (free) Windows software, Electrosoft; All data is included in a database of loggers detailing their dispatch dates, locations and due dates, allowing you to track the location of multiple loggers.

The Electrorecorder range use a constant sampling technique, unlike the single 'snap-shot' reading of competitors. When the Electrorecorders start to record, they sample every input 16 times per 50/60 Hz cycle. At the end of each (user set) averaging period, 3 quantities are saved for each input, 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 Electrorecorder can continue to record for 2 months. An external 12Vdc PSU input is available, to allow for prolonged logging without batteries.

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.

The EC-3A-RS is specifically designed to monitor one, two or three current channels.

The EC-3A-RS has two user selectable current ranges of  
~5Aac to 400Aac  
~20Aac to 3kAac.

If you require lower current ranges down to 0.5Aac, consider the CT-3A-RS.

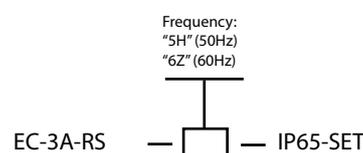
Technical specifications (subject to change without notice)

Recorded values	$I_{avg}$ , $I_{max}$ & $I_{min}$ on all 3 channels
Current input socket types (all channels)	4 pin shrouded plugs and sockets
Supplied current sensor	CAT III 1kV or CAT IV 600V, with 140mm aperture
Current measurement range (I <sub>rms</sub> )	RS model is ~4Aac - 400Aac and ~20Aac - 3kAac
Current measurement accuracy	typically ±2% of range, within 10% - 90% of selected range, otherwise 5% of range
$I_{max}$ & $I_{min}$ time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
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 dimensions	Lead Length 2m/6'6" Sensor Length 450mm/18" Sensor Diameter 145mm/6"
Battery life while logging	Unlimited - 12Vdc PSU option & battery backup or 1 month while unpowered externally.
Battery type	Loggers contains six 1.5V Alkaline 'AA Cell' batteries (IEC-LR6, ANSI/NEDA-15A).
Communications interface type	USB, optically isolated to 5,2kV
Environmental (temp & sealing)	-10C to +40C or +14°F to +104°F. Sealed to IP65
Dimensions & weight	Metric 190 x 120 x 60mm & 1kg Imperial/English - 7.5" x 5" x 2.5" & 2lb
Standards	Recording - EN50160: 1994 - 1000V CAT III, 600V CAT IV

Determining product order codes:

To specify your Electrorecorder select the correct frequency code.

For example: EC-3A-RS-5H-IP65-SET.



Warranty & calibration

Acksen Ltd products carry a \*Lifetime back to base warranty covering manufacturing defects and component failures. Each unit is individually calibrated during testing.

\*Refer to website for full terms and conditions.

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).