

Electrocorder Model: AL-2VA

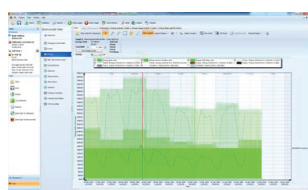


**One voltage channel
300Vac**

**One current channel
16Aac**

**Complete with Electrosoft
energy analysis software**

**Sealed to IP43 as
standard**



Allows users to record energy consumption up to 300V, 16A

Internal current sensor

Data stored in non-volatile memory

Memory capacity of 32,000 true RMS voltage values per phase (10 bit), up to 300 days continuous recording

Selectable averaging period to suit each situation

Accurate to $\pm 2\%$ of range, typically

Kit includes data logger, mains socket, 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 AL-2VA is designed to allow users to monitor one voltage channel and one current channel. Allowing users to monitor the main voltage supply and the load current, therefore enabling staff to determine the energy consumption of various appliances or items of equipment.

Setting up the Electrocoder AL-2VA 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 the location of multiple loggers.

Why is the Electrocoder better than other similarly priced competitors? The Electrocoder 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 voltage and current levels are stored with dates and times. With the backup battery, the logger can continue to record for months. On the logger, recording is signified by a flashing green light. A red light advises users that the unit has completed recording.

When the logger has finished recording, the stored data is uploaded to a PC via the supplied USB cable. Using Electrosoft, the recorded voltage and 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. Electrosoft also provides an internal database which effectively manages the distribution of multiple loggers.

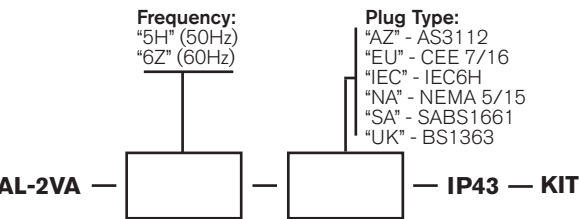
Various models are available. The AL-2VA has various current rating based on the plug selection, for example the UK option has a limit of 13A, whereas the NA option extends to 16A.

Technical specifications (subject to change without notice)

Measurement range (Vrms)	10Vac to 300Vrms
Maximum channel input voltage	300Vrms
Voltage Input	One voltage input via plug
Voltage measurement accuracy	±2% of reading (10 bit) within 90Vac - 300Vrms otherwise ±3%. (50/60Hz ±2%)
V _{min} , V _{max} , I _{max} & I _{min} time resolution	Always one cycle (50/60 Hz), independent of selected averaging period
Current measurement range (Irms)	0.1A – 13A
Current Input	Internal sensor
Current measurement accuracy	±2% of range, typically
Sampling frequency (all channels)	16 samples per cycle 800Hz @ 50Hz or 960Hz @ 60Hz
Memory capacity	Average voltage & current, max & min voltage & current values during the averaging period
Data recorded	192kB able to record 32,000 voltage & current levels per channel
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%
Lead lengths	Metric 1 metre; Imperial/English 3' 3" (3 feet, 3 inches)
Battery life (while plugged in)	Unlimited – While unplugged battery life is typically 9,000 hours/1 year
Battery type	Unit contains three 9V Alkaline battery (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 IP43
Dimensions & weight	Metric 145 x 90 x 45mm & 500g Imperial/English – 5.5" x 3.5" x 3" & 1lb

Determining product order codes:

To specify your Electrocoder select various codes and enter into the boxes in order to create an accurate product code. For example: AL-2VA-5H-UK-IP43-KIT.



Warranty & calibration

All Acksen Ltd products carry a minimum of a one year's back to base 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).