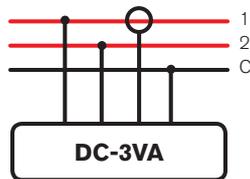


Electrocorder Model: DC-3VA

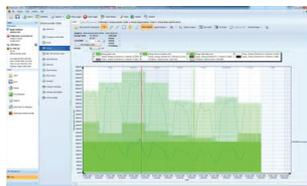


**2 voltage channels
300Vdc**

**1 current channel
±10Adc to ±100Adc
±30Adc to ±300Adc
±100Adc to ±1kAdc**

**Complete with Electrosoft
energy analysis software**

**Sealed to IP43 as
standard, available as
IP65/NEMA 12/4**



Monitor charging circuits, PV (photovoltaic) cell, DC motor and many other application.

Records voltage up to 300Vdc & loads up to 1kAdc, model dependent

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:-
Voltage 1Vdc to 300Vdc < 1% of range
Current 10Adc/100Adc Model < 1% accuracy
30Adc/300Adc Model < 1% accuracy
100Adc/1kAdc Model < 1% accuracy

Kit includes data logger, fused voltage leads, DC current probes, USB lead, 12Vdc PSU, 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.

acksen > Electrorecorder Model: DC-3VA

The DC-3VA is specifically designed to accurately monitor one or two DC voltage channels, 1V to 300Vdc and one DC current channel.

Setting up the Electrorecorder DC-3VA 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 Electrorecorder better than other similarly priced competitors? The Electrorecorder 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 back-up battery, the Electrorecorder can continue to record for 4 weeks. 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.

On the logger, recording is signified by a flashing green light. A red light advises users that the unit has completed recording.

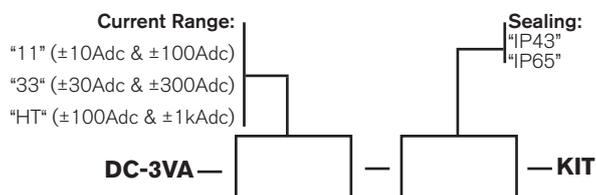
Two models are available. The DC-3VA-11 has a range of $\pm 10\text{Adc}$ to $\pm 100\text{Adc}$, DC-3VA-33 has a range of $\pm 30\text{Adc}$ to $\pm 300\text{Adc}$, DC-3VA-HT has a range of $\pm 100\text{Adc}$ to $\pm 1\text{kAdc}$.

Technical specifications (subject to change without notice)

Recorded values	V_{avg} , V_{max} & V_{min} on 2 channels, non-isolated, I_{avg} , I_{max} & I_{min} on 1 channel
Voltage input socket types (all channels)	4mm shrouded plugs and sockets
V_{max} & V_{min} time resolution	20ms, independent of selected averaging period
Input impedance	10M Ω
Voltage measurement range	1Vdc to 300Vdc
Voltage (DC) measurement accuracy	1Vdc – 5Vdc < 2%, 60V model = 6Vdc – 60Vdc < 1%. 60Vdc – 300Vdc ~2%
Current measurement range	$\pm 10\text{Adc}$ to $\pm 100\text{Adc}$ or $\pm 30\text{Adc}$ to $\pm 300\text{Adc}$ or $\pm 100\text{Adc}$ to $\pm 1\text{kAdc}$ selectable range
Current measurement accuracy	<5% of selected range
Sampling frequency (all channels)	800Hz, 1.25ms (10 bit resolution)
Memory capacity	192kB able to record 32,000 levels per channel
Memory type	Non-volatile SEEPROM
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%
Input lead length	Metric 2 metres; Imperial/English 6' 6" (6 feet, 6 inches)
Battery life while logging	12Vdc PSU option & battery backup or up to 4 weeks 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. Sealed to IP43 (IP65 Optional)
Dimensions & weight	Metric 260 x 180 x 190mm & 2kg Imperial/English - 10" x 7" x 8" & 4lb
Standards	Recording - EN50160: 1994 - CAT II

Determining product order codes:

To specify your Electrorecorder select various codes and enter into the boxes in order to create an accurate product code. For example: DC-3VA-HT-IP43-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).