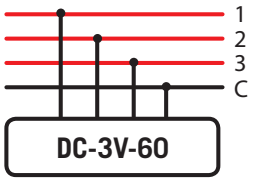
ELECTROCORDER

Model: DC-3V-60

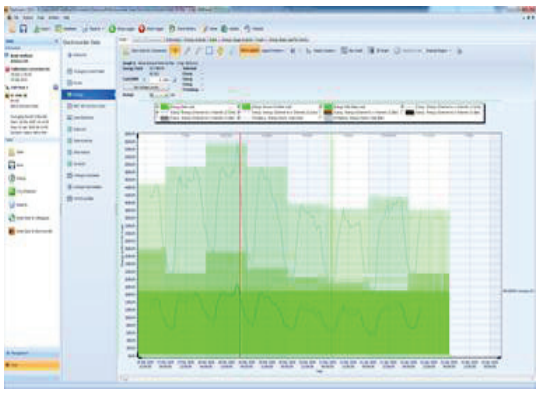
Single & Three Phase Voltage Logger

3V 60V IP43

IP65
NEMA 12/4
available



Three Channel; 60Vdc (D1, D2 & D3 to Common)
Constant Sampling technique, misses very little data
Can be used to record DC currents when used with appropriate transducers
Available as IP65/NEMA 12/4



- Monitor charging circuits, PV (photovoltaic) cell, DC motor, and many other application.
- Accurately record DC voltages up to 60Vdc.
- Three voltage input channels (D1, D2, & D3).
- Records V_{Avg}, V_{Max} & V_{Min} on all 3 channels. Data is stored in non-volatile memory.
- Optional DC current transducers available.
- Recorded data is uploaded to a pC for analysis with Electrosoft.
- Free software, Electrosoft.
- Kit includes Logger, Carry Case, Electrosoft software, four input leads, USB lead & 12Vdc PSU.
- 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 <1% of range.
- Accuracy:-
  1V – 5V < 2% of reading.
  6V– 60V < 1% of reading.
- Order code:-
  DC-3V-60-KIT

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ELECTROCORDER

Model: DC-3V-60

The Electrocorder range is designed to allow users to monitor single, two or three channels.

Setting up the Electrocorder DC-3V-60 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 will 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 units.

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.

When recording the Electrocorder will store the average voltage and 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 voltage 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 DC voltage channels, 1V to 60Vdc. Allowing you to monitor charger performance and PV (photovoltaic) cell output, as well as many other applications like DC motors. There are many models of Electrocorder, to suit many logging situations and user's requirements.

The product KIT is supplied with four voltage input leads, a carry case, USB lead, Electrosoft and a 12Vdc PSU.

TECHNICAL SPECIFICATIONS (subject to change without notice)	
Recorded values	V_{avg}, V_{max} & V_{min} on 3 channels, non-isolated
Voltage Input socket types (all channels)	4mm shrouded plugs and sockets
V_{max} & V_{min} time resolution	20 ms, independent of selected averaging period
Input impedance	10MΩ
Voltage measurement range	60V range, 1Vdc to 60Vdc, 10V range (current transducers), 0.2Vdc to 10Vdc
Voltage (DC) measurement accuracy	1V – 5V < 2%, 6V – 60V < 1%
Sampling frequency (all channels)	800Hz @ 50Hz or 960Hz @ 60Hz (10 bit resolution)
Data recorded	Average, max & min current values during the averaging period
Memory capacity	192kB able to record 32,000 current 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	Unlimited – 12Vdc PSU option & battery backup or 6 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 IP43
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 certified (light industrial, 3V/m).

ORDERING - DC-3V-60-KIT – inc. case, software, serial lead, input leads, current transducer & user guide.

	Description	ENVIRONMENTAL SEALING	ORDER CODE
1	KIT includes items 2-7 DC-3V-60	IP43	DC-3V-60-KIT
2	Replacement – Logger (includes. 4 of item 5)	IP43	DC-3V-60-LOG
3	Replacement - Carry Case	N/a	DC-3V-60-CC1
4	Replacement - USB Lead	IP43	DC-USB-01
5	Replacement Voltage Lead	IP43	DC-UFVL-RD/BK
6	Replacement – Batteries (14 per unit)	Internal to logger	DC-3V-60-BAT
7	Plug-in mains 12Vdc PSU	None	DC-3V-60-12VPSU

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