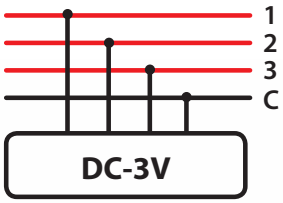
accsense
Simple and Reliable

Electrocorder

Model:
DC-3V



3V 60V IP65

Three channels; 60Vdc (D1, D2 & D3 to Common)

Complete with Electrosoft energy analysis software

Sealed to IP65/NEMA 12/4

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

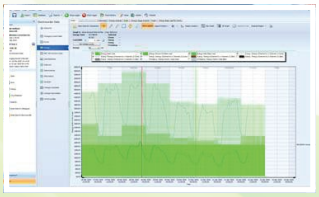
Optional DC current transducers available (contact us).

Data stored in non-volatile memory.

Memory capacity of 32,000 (True RMS) values per channel (10bit), up to 300 days continuous recording.

Accuracy:
1V – 5V < 2% of reading
6V – 60V < 1% of reading

Kit includes data logger, USB lead, 12Vdc PSU, Electrosoft software and a carry case. 60Vdc comes with unfused voltage input leads.



The advantage of 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 DC-3V is specifically designed to accurately monitor charger performance and PV (photovoltaic) cell output, as well as many other applications like DC motors.

Setting up the Electrocorder DC-3V 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 Electrocorder better than other similarly priced competitors? The Electrocorder range uses 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. 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, the lowest cycle value. This means that it will record all the peaks and troughs which are one cycle or longer.

The voltage levels are stored with dates and times. With the backup battery, the Electrocorder can continue to record for up to a year.

The recorded data is uploaded to a PC via the supplied USB cable. Using Electrosoft, the recorded current levels with dates and 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.

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

Other models are available up to a maximum of 300Vdc. Contact us for more information.

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, 300V range, 1Vdc or 300Vdc
Voltage (Dc) Measurement Accuracy	1V – 5V < 2%, 60V model, 6V – 60V < 1%.
Sampling Frequency (All Channels)	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	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, baud of 19,200, optically isolated to 5,2kV
Environmental (Temp & Sealing)	-10C to +40C or +14°F to +104°F, Sealed to IP65
Dimensions & Weight	10" x 7" x 8" & 4lb

Warranty & Calibration
All Accsense Electrocorder 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).

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