

DICKSON

EV100

Event Data Logger

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Product Applications

The EV100 Event Data Logger is ideal for documentation of ON/OFF cycle patterns of any electrical equipment including pumps, chillers, conveyers and processing equipment. Its small and rugged design fits almost any application.

EV100 Useful Features

- Records and monitors On/Off Events from 120V to 240V AC parallel (voltage triggered operation)
- Battery operation—1 year battery life
- Stores 65,512 sample points
- Delayed start capability

Other Useful Features

- **Delayed Start:** Program how many Days, Hours and Minutes you would like to pass before your logger begins logging.
- **Real Time Monitoring:** Monitor and graph your process as it happens and print and save from real time screen. (This feature should be used sparingly as it causes the battery to drain more quickly)
- **Customize Graphed Data:** DicksonWare™ calculates Min, Max and Average of all data collected. Customize data by eliminating unnecessary data points and customize Min, Max and Average to show only desired information.
- **Export Data:** A snapshot of your graph or a real-time graph of points can be easily exported to other programs such as Excel™ or PowerPoint™.

Click on the features button in the software for detailed instructions on how to use above features

Product Specifications



| | |
|---|--|
| Number of Channels: | One |
| Range: | On/Off events from 120V to 240V AC parallel operation (voltage triggered) |
| Input Connection: | Alligator clips with 5' cord (included) |
| Ambient Operating Conditions: | -22 to +185°F; 0 to 95% RH (non-condensing) |
| Data Storage: | 65,512 sample points |
| Power Supply: | 3V Lithium coin cell battery, approx. 1 year at 1 min. sampling (user-replaceable) |
| Sample Interval: | Records data in configurable 10 second to 24 hour intervals |
| Software: | Microsoft Windows® 95, 98, 2000, NT and XP compatible |
| Approvals: | CE |
| Dimensions: | 3.1" x 2.1" x 0.9" |
| Minimum DicksonWare™ Version Required: | 7.2 |

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Product Applications & Useful Features

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Getting Started

- Install the DicksonWare™ Software.
- Connect the cable (supplied with the software) to the logger and to a working serial port on your computer.
- Click the Setup button. When the setup window appears, all fields should be automatically filled in, this will confirm that DicksonWare™ has recognized the logger. Should all fields remain blank, refer to “No Communication” in the Trouble Shooting section. Once DicksonWare™ recognizes the logger, press the Clear button. This will delete all data currently stored.
- The logger is now sampling and ready for use. The default sample interval is 1 minute.
- Verify that the indicator light is flashing every 10 seconds. You may choose to change Default settings for sample interval and start-date and time. When changing these settings, the logger will automatically go through the clear process to accept your changes.

NOTE: For most applications the sample interval should be left at 10 seconds because this will yield the best resolution. However, applications with very long cycle times may require that the sample interval be increased in order to provide adequate logging time.

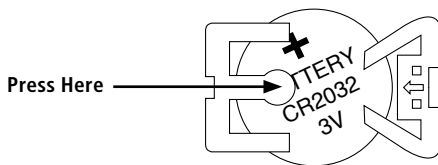
- Application of a voltage in the range of 120 to 240 VAC across the leads (parallel connection, voltage triggered) will cause the unit to log an “ON” state for the duration of the time that the voltage is applied. If the control voltage is other than 120 to 240 VAC, it must be transformed to the appropriate range. For example, AC voltages lower than 120 VAC require the use of a step up transformer. The EV100 can be used on 3 Phase 240V motors by connecting the leads to 2 of the phases.

NOTE: To conserve battery life when storing unit, press the Setup button and select Stop When Full. You may also use the delayed start feature to conserve battery life.

Battery Replacement

- The battery will operate the logger for 1 year at room temperatures. Operation of the logger at the temperature extremes or in real-time mode for prolonged periods, will significantly reduce battery life. The Battery Level Monitor on the Setup screen displays the battery voltage and a Low Battery Warning when replacement is needed.
- To replace the battery, open the case by removing the screw in the back. Remove the battery from its holder by pressing hard on the battery holder tab. Replace the battery with a Lithium CR-2032 type; + side up. Close case with screw.

NOTE: The logger will stop sampling; however, memory will not be lost when replacing battery. To start sampling again download the data and then Clear Memory.



DicksonWare™ Software Specifications

- Microsoft Windows® compatible
- Allows for simple viewing and zooming of logged data
- Easy set-up of Dickson Data Loggers including:
 - User selectable sample intervals from 10 seconds to 24 hours
 - Display temperature in °C or °F
 - Delayed logger start times
 - Logger data capacity can be set to wrap data or stop when full
 - Allow for real time monitoring and graphing.
 - Effortless exporting of data and graphs to other software
 - Data can be viewed in tabular (numeric/table) or graphical formats
 - Fast downloading of logged data - 30 seconds (typical) from full logger
 - Even shows battery power status for battery operated loggers

Specifications:

- **Compatible With:** Microsoft Windows® 95, 98, 2000, NT & XP
- **PC Requirements:** PC with 386 MHz or better microprocessor, 4 M RAM, 1 free COM (serial) port, CD drive
- **Cable Type/Length:** 9 pin male D-shell to male 2.5mm stereo plug, 6' long
- **Computer Interface:** RS-232 COM (serial) port
- **DicksonWare™ Version Required (minimum):** See Specific Model for Version Requirement

Accessories (for current pricing go to www.dicksondata.com or call 1-800-323-2448)

| Software | Order # |
|---|---------|
| DicksonWare™ Software and Serial Download Cable | A015 |
| Cases | Order # |
| Locking Wall Mount Case | A715 |
| Waterproof Pouch | A713 |

Frequently Asked Questions

- 1. Sample Interval:** The Sample Interval determines how frequently the data logger will save a reading. Using DicksonWare™ Software, the user can set a Sample Interval ranging from 10 seconds to 24 hours in 10 second increments. A temperature logger with data storage of 32,512 set at a 10 second Sample Interval will record for 3.75 days, while the same logger set at a 1 minute Sample Interval will record for 22.5 days.
- 2. Data Storage:** Data Storage is the number of Sample Points a data logger can hold. You will find models that range from 7,680 samples to 32,512. A temperature logger with Data Storage of 32,512 and a sample interval set at 30 seconds would record for 11.25 days, while a temperature logger with Data Storage of 7,680 and the same sample interval would record for only 2.6 days.
- 3. Does it have to stay connected to a PC in order for it to work?** No. Unless you're viewing data in real-time you only connect the logger to a PC when you want to view / retrieve data.
- 4. What happens when all the storage space is taken up? Do I have to throw it away?**
- After you have downloaded the data, you simply "clear" the logger and it is ready to log more data.
- 6. What happens if I leave it monitoring somewhere too long?** The Data Loggers have two user selectable modes, Stop and Wrap. In Stop mode, they will quit logging data when the memory is full. In Wrap mode, the Logger will begin to overwrite the oldest data in its memory.
- 7. Where can I put them?** Depending on the Dickson model, just about anywhere. We have waterproof units, stainless steel models, units with probes, and units that handle extreme temperatures. Our wide selection of instruments should fit about any application.
- 8. What is the biggest advantage of a Data Logger?** Its data is "logged", stored on a microchip inside the Data Logger. Data in electronic memory takes advantage of the power of a PC and software.
 - * Store the data as you would store any document on your PC.
 - * Retrieve archived data as easily as opening a file on your PC.
 - * Share the data as you would any PC file, email, copy and paste.
 - * Data can be imported into spreadsheet software and word processing documents.
 - * Easily import data from multiple data loggers onto a single graph.
- 9. How are they mounted?** The smallest ones, about the size of a pager, can be wall-mounted with Velcro or simply set anywhere you need to monitor. The larger units have keyhole slots for wall mounting and can also stand on their own.

Troubleshooting

For troubleshooting information, click [here](#) for the EV100 technical support page.

Warranty

Dickson warrants that the products it sells will be free from defects in material and workmanship under normal use and service for a period of twelve months after delivery. In the event of a claim under this warranty, the product or part must be returned to the factory for repair or replacement (shipping pre-paid) with a Return Authorization Number (see Return Information above). It will be repaired at Dickson's option without charge. This warranty DOES NOT cover routine calibration, pen, chart and battery replacement. The foregoing warranty and remedy are exclusive and in lieu of all other warranties either expressed or implied. Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products. Dickson makes no warranty for products not manufactured by it or for any products modified by buyer, or subject to misuse or neglect.

Factory Service & Returns

Contact the factory (630-543-3747) for a Return Authorization (RA) Number before returning any instrument. The model number, serial number and a purchase order number will be requested before an RA number is issued.

- Carefully repack the instrument, label the outside of the box with the RA# and return the instrument (freight pre-paid) to Dickson.
- All instruments that do not have the RA# clearly marked on the outside of the box will be refused. When returning instruments for credit, please include all accessories in shipment.
- Calibration/Freight charges are non-refundable.

NOTE: Dickson shall not be liable for consequential or incidental damages resulting from failure or malfunction of its products.

- **Customer Satisfaction:** Dickson takes pride in providing you, the customer, with the highest quality instrumentation. We welcome the opportunity to help you in any way possible. Whether it be a question or a new idea in documentation, the Dickson Company would like to hear your response. Please call our Customer Service Department at 1-800-323-2448 or (630) 543-3747 (in Illinois).
- **Software Return Policy:** IMPORTANT-Read your Software License Agreement carefully before installing software. Dickson will accept returns for replacement of defective disks and CDs only.

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930 South Westwood Avenue
Addison, Illinois 60101