

Sentinel® AC & DC Voltage Logger Models SDL V301 & SDL V401



Model SDL V401

The Sentinel® Voltage Logger Models SDL V301 and SDL V401 are designed for recording AC and DC voltages. Available in both three- and four-channel models, they are easy to configure and use.

Features

- True RMS voltage measurements
- DC voltage measurements
- Low-cost, self-contained, portable
- Differential three-phase inputs
- Programmable storage mode
- Programmable data storage rate
- Records up to 480,000 measurements (1MB)
- 64 samples per cycle
- Includes DataView® software
- Optically isolated USB 2.0 communication
- 600V Cat. III, 300V Cat. IV

Applications

- Phase unbalance monitoring
- Surge and Sag recording
- Line surveys
- Battery bank monitoring



Model SDL V301 recording three-phase voltage on a lighting panel.



USB cable is included with all Sentinel® Data Loggers



120V US wall charger is included with Model SDL V401

Specifications

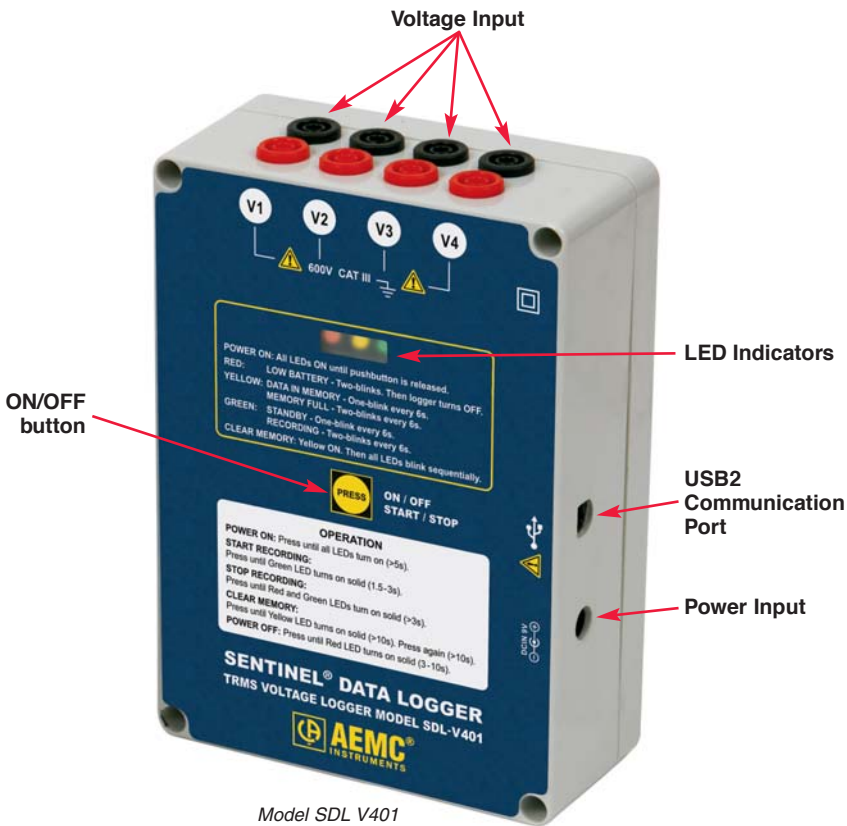
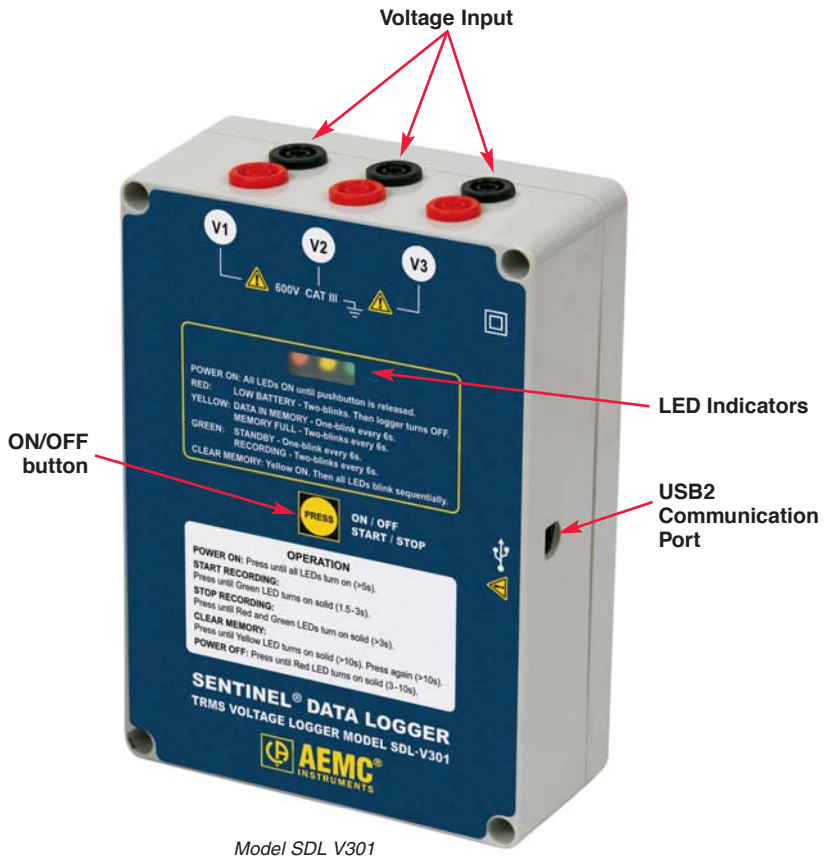
MODELS	SDL V301	SDL V401
ELECTRICAL		
Number of Channels	Three	Four
Input Termination	Recessed banana jacks	
Voltage Range	0 to 600VAC; 0 to 850VDC	
Resolution	0.1V	
Accuracy	5 to 85V: $\pm 1\%$ of Reading $\pm 0.6V$ 85 to 600VAC/850VDC: $\pm 0.25\%$ of Reading $\pm 0.6V$	
Sample Rate	64 samples/cycle	
Storage Rate	Programmable from 250ms to 12 hours	
Storage Technique	Stop when full, FIFO, and Extended Recording Mode (XRM™)	
Memory Capacity	480,000 measurements (1MB)	
Communication	USB 2.0 optically isolated	
Controls	One button to turn logger on/off and start/stop recording	
Indicators	Red, Yellow and Green status indicators	
Power Source	Four 1.5V C Alkaline batteries	AC power/rechargeable NiMH batteries
Battery Life*	100 hours to 90 days	Power ride through 10 hours
MECHANICAL		
Protection Index	IP50	
Dimensions	6.73 x 4.76 x 2.17" (171 x 121 x 55mm)	
Case Material	Polycarbonate UL94 V-2	
ENVIRONMENTAL		
Operating Temperature	14° to 122°F (-10° to 50°C)	
Storage Temperature	-4° to 140°F (-20° to 60°C)	
Relative Humidity	0 to 85% RH	
SAFETY		
Safety Rating	600V Cat. III, 300V Cat. IV	
Double Insulation <input type="checkbox"/>	Yes	

*Dependent on sample rate.



Sentinel® Voltage Logger Model SDL V301 includes three sets of color-coded (black and red) leads and alligator clips (one set pictured above). Model SDL V401 includes four sets of color-coded (black and red) leads and alligator clips.

Construction



DataView®

DataView® Software – Data Analysis and Reporting Software

Features

- Display and analyze real-time waveform and harmonic data on your PC*
- Display waveforms, trend graphs, harmonics and text summaries
- Configure all data logger functions and parameters from your PC including sample rate, recording length, channel configuration and more
- Create and store a complete library of configurations that can be uploaded to the logger as needed
- Zoom in and out and pan through sections of the graph to analyze the data
- Download, display and analyze recorded data
- Create custom views and reports
- Print reports using standard or custom templates you design
- Free on-line software upgrades

Minimum system requirements

- Windows®98/2000/ME/XP
- 28MB of RAM for Windows®98/2000/ME (256MB recommended)
- 256MB of RAM for Windows®XP
- 35MB of Hard Disk Space (200MB recommended)
- CD-ROM drive

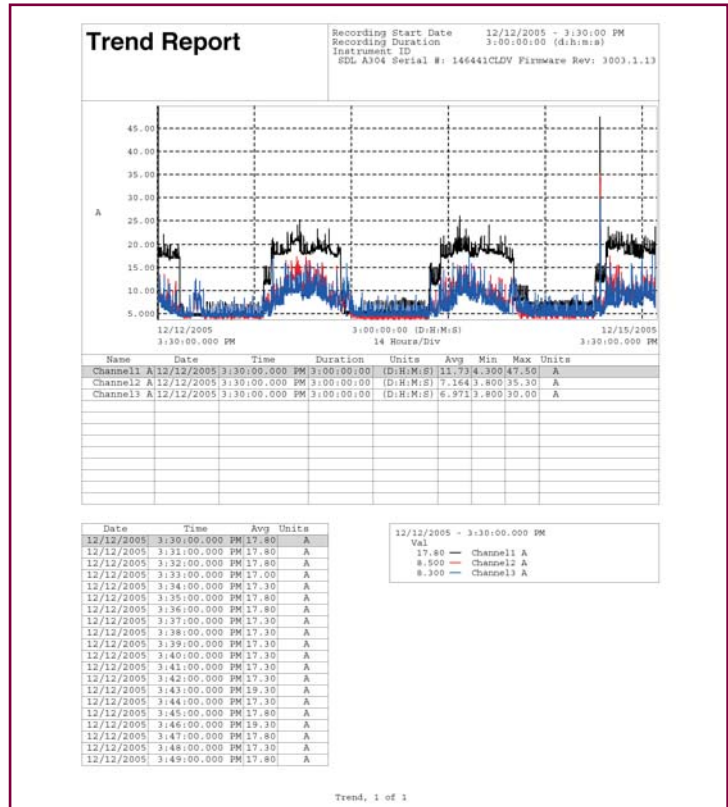
*Real-time data is not stored in the logger, but can be stored in your PC on demand.



DataView® is included with all Sentinel® Loggers

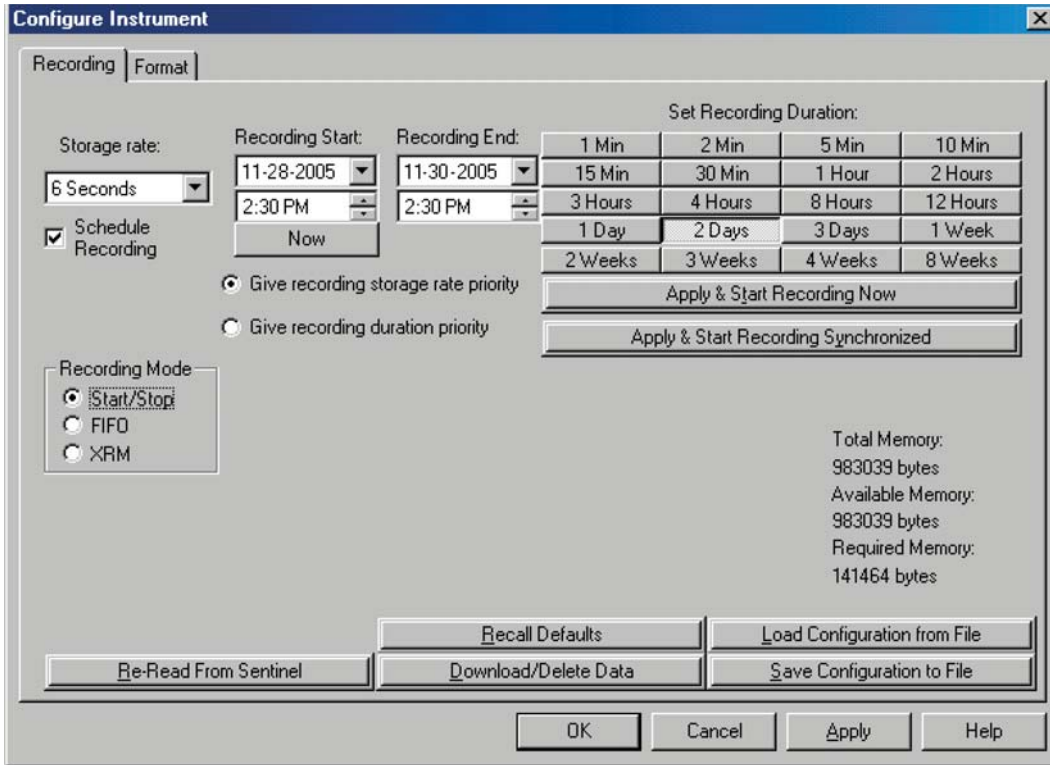


System configuration as well as data retrieval and analysis is easily accomplished using DataView® and Sentinel® connected to your computer using a USB port.

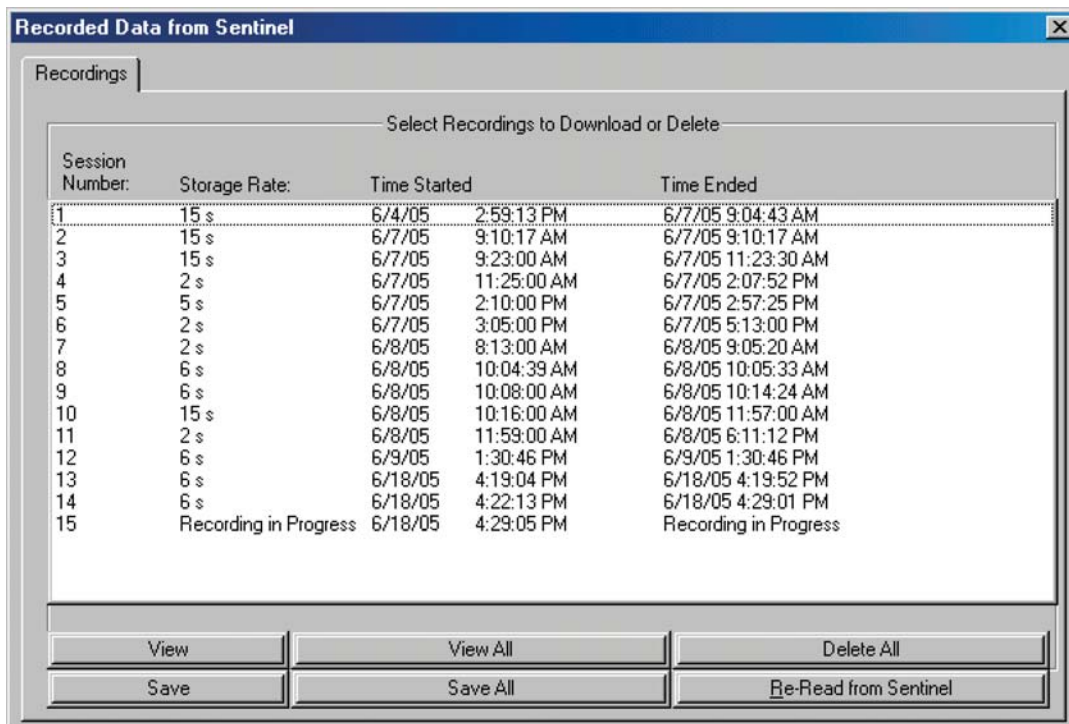


Typical report printout showing graphical text and information from recorded data.

Dataview Displays

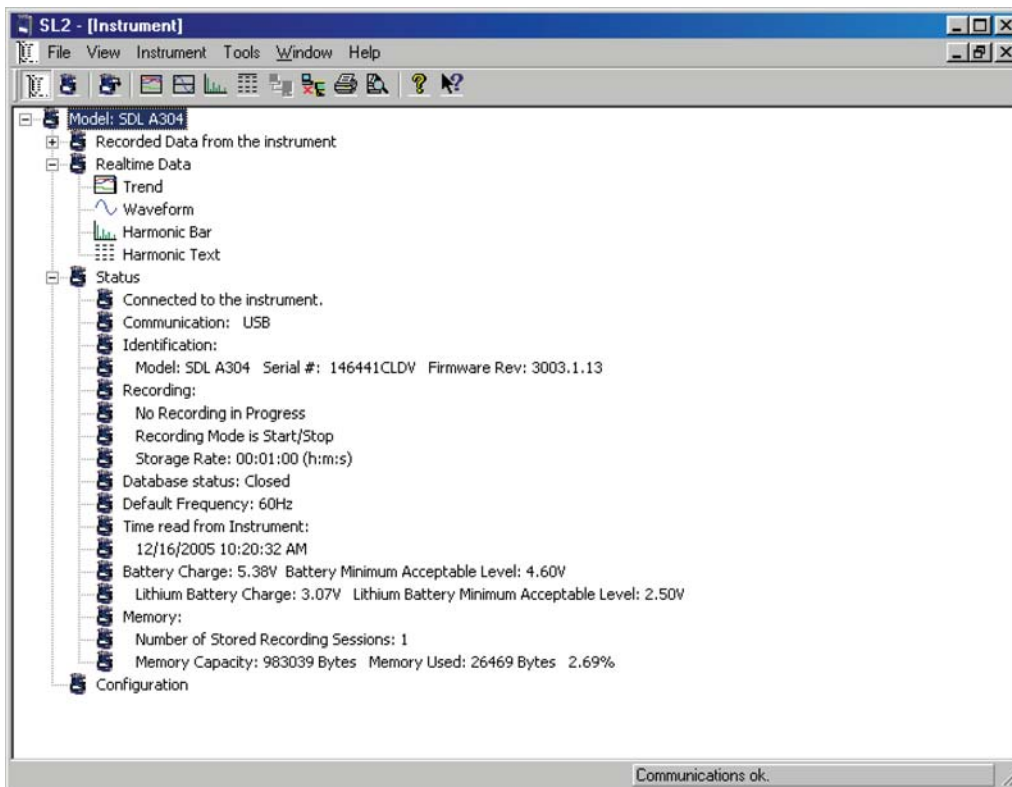


Tabbed configuration dialog boxes allow for easy setup of all recording functions.

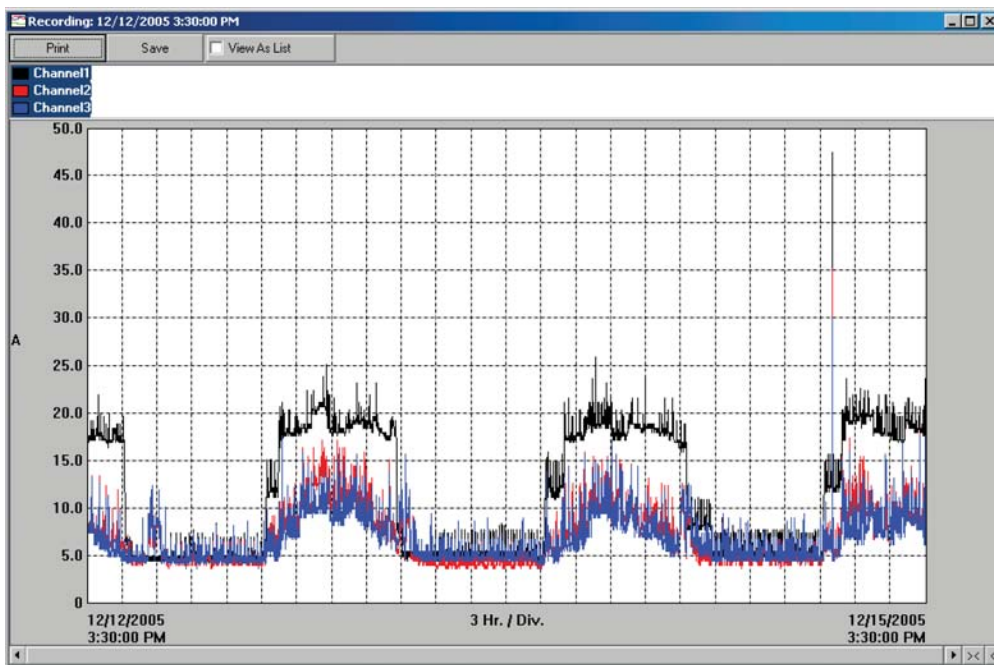


Recorded data dialog box allows clear and easy access to all stored data sessions in the Sentinel® data logger. You can choose an individual session or all sessions to download.

Dataview Displays

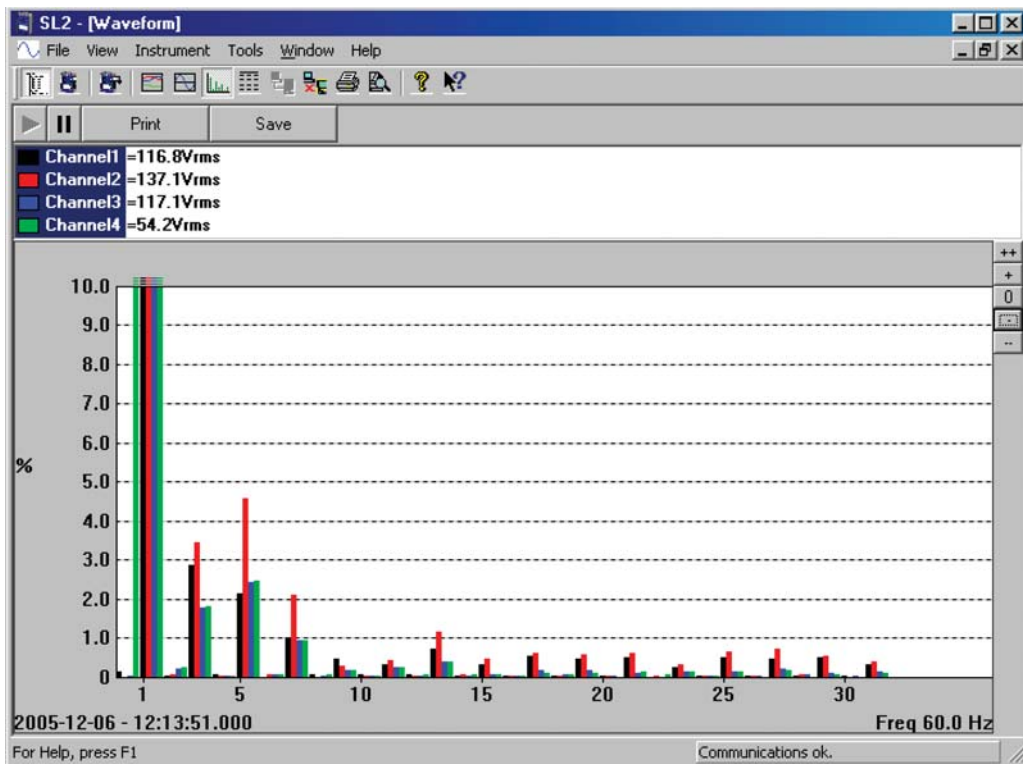


Clear and easy-to-read status update is displayed when DataView® and Sentinel® Loggers connect. From this menu you can view real-time data, download recorded data and configure the Sentinel® Logger.



Typical real-time waveform display of data being monitored or recorded.

Dataview Displays



Harmonic content displayed in bargraph form in real time using DataView® for any or all inputs.

Channel1 = 40.00Arms
 Channel2 = 1.75Arms
 Channel3 = 2.00Arms

	%		%		%		%		%		%
H00	0.4	H01	100.0	H02	0.8	H03	60.1	H04	0.7	H05	22.5
H06	0.4	H07	21.0	H08	1.1	H09	13.6	H10	1.0	H11	12.5
H12	0.6	H13	10.8	H14	0.1	H15	8.8	H16	0.7	H17	8.7
H18	1.4	H19	6.7	H20	0.4	H21	6.8	H22	0.4	H23	6.6
H24	1.0	H25	6.5	H26	0.7	H27	5.3	H28	0.8	H29	6.6
H30	1.0	H31	6.7								

12/16/2005 - 11:10:13.000 AM Freq 60.0 Hz

Harmonic content information can be displayed in a text format for all harmonics out to the 30th.

Comparison Chart

MODEL	SDL V301	SDL V401	SDL A301	SDL A302	SDL A303	SDL A304	SDL A401	SDL A402
Input Type	AC/DC Volts	AC/DC Volts	AC Amps	AC Amps	AC Amps	AC Amps	AC Amps	AC/DC Amps
AC Range	0 to 600Vac	0 to 600Vac	5 to 1000A	15 to 3000A	5 to 1000A	15 to 3000A	5 to 1000A or 15 to 3000A, sensor dependent	Probe dependent
DC Range	0 to 850Vdc	0 to 850Vdc	–	–	–	–	–	Probe dependent
Resolution	0.1V	0.1V	0.1A	0.25A	0.1A	0.25A	0.25A	Probe dependent
Input Termination	Recessed banana jacks	Recessed banana jacks	Hard-wired flexible CTs	Hard-wired flexible CTs	Hard-wired flexible CTs	Hard-wired flexible CTs	BNC	BNC
No. of Inputs	Three	Four	Three	Three	Three	Three	Four	Four
Sample Rate	64 samples/cycle	64 samples/cycle	64 samples/cycle	64 samples/cycle	64 samples/cycle	64 samples/cycle	64 samples/cycle	64 samples/cycle
Memory Capacity	(1MB) 480,000 measurements	(1MB) 480,000 measurements	(1MB) 480,000 measurements	(1MB) 480,000 measurements	(1MB) 480,000 measurements	(1MB) 480,000 measurements	(1MB) 480,000 measurements	(1MB) 480,000 measurements
Power Source	Alkaline batteries	AC power/ NiMH batteries	Alkaline batteries	Alkaline batteries	AC power/ NiMH batteries	AC power/ NiMH batteries	AC power/ NiMH batteries	AC power/ NiMH batteries
Battery Life	100 hours to 90 days	Power ride through 10 hours	100 hours to 45 days	100 hours to 45 days	Power ride through 10 hours	Power ride through 10 hours	Power ride through 10 hours	Power ride through 10 hours
What's Included	Six color-coded leads, DataView® software, batteries, user manual	Eight color-coded leads, DataView® software, batteries, 120V wall charger, user manual	Three hard-wired flexible CTs, DataView® software, batteries, user manual	Three hard-wired flexible CTs, DataView® software, batteries, user manual	Three hard-wired flexible CTs, DataView® software, batteries, 120V wall charger, user manual	Three hard-wired flexible CTs, DataView® software, batteries, 120V wall charger, user manual	DataView® software, batteries, 120V wall charger, user manual	DataView® software, batteries, 120V wall charger, user manual

ORDERING INFORMATION

CATALOG NO.

Sentinel® Voltage Logger Model SDL V301 (3-Channel, 600VAC, three color-coded leads and alligator clips, four C-cell batteries)	Cat. #2134.10
Sentinel® Voltage Logger Model SDL V401 (4-Channel, 600VAC, four color-coded leads and alligator clips, rechargeable NiMH batteries, 120V US wall charger)	Cat. #2134.11
Accessories (Optional)	
Set of one black and one red leads with alligator clips	Cat. #2118.51
Banana (Female) – BNC (Male) Adapter (XM-BB)	Cat. #2118.46
Bag – Large Classic Tool Bag	Cat. #2133.71

Contact Us

United States & Canada:

Chauvin Arnoux[®], Inc.
d.b.a. AEMC[®] Instruments
200 Foxborough Blvd.
Foxborough, MA 02035 USA
(508) 698-2115 • Fax (508) 698-2118
www.aemc.com

Customer Support – for placing an order, obtaining price & delivery:
customerservice@aemc.com

Sales Department – for general sales information:
sales@aemc.com

Repair and Calibration Service – for information on repair & calibration, obtaining a user manual:
repair@aemc.com

Technical and Product Application Support – for technical and application support:
techinfo@aemc.com

Webmaster – for information regarding www.aemc.com:
webmaster@aemc.com

South America, Central America, Mexico, Caribbean, Australia & New Zealand:

Chauvin Arnoux[®], Inc.
d.b.a. AEMC[®] Instruments
15 Faraday Drive
Dover, NH 03820 USA
(978) 526-7667 • Fax (978) 526-7605
export@aemc.com
www.aemc.com

All other countries:

Chauvin Arnoux SCA
190, rue Championnet
75876 Paris Cedex 18, France
33 1 44 85 45 28 • Fax 33 1 46 27 73 89
info@chauvin-arnoux.com
www.chauvin-arnoux.com