### Sentinel<sup>®</sup> Current Logger Models SDL A301, SDL A302, SDL A303 & SDL A304



205 Westwood Ave Long Branch, NJ 07740 1-877-742-TEST (8378) Fax: (732) 222-7088 salesteam@Tequipment.NET

Model SDL A304

The Sentinel<sup>®</sup> Current Logger Models SDL A301, SDL A302, SDL A303 and SDL A304 are designed for recording AC current through integral flexible current probes for each input.

### **Features**

- True RMS current measurements
- · Low-cost, self-contained, portable
- Integral 24" flexible current probes for three-phases
- · Measures up to 1000A or 3000A
- · Programmable storage mode
- · Programmable storage rate
- Records up to 480,000 measurements (1MB)
- · 64 samples per cycle
- Includes DataView<sup>®</sup> software
- Optically isolated USB 2.0 communication

- AC powered with rechargeable NiMH batteries (Models SDL A303 and SDL A304)
- 600V Cat. III, 300V Cat. IV

### **Applications**

- · Load monitoring
- HVAC monitoring
- · Energy management
- · Preventative maintenance



### **Specifications**

MODELS	SDL A301         SDL A302         SDL A303         SDL A30									
ELECTRICAL			1	1						
Number of Channels	Three	Three	Three	Three						
Input Termination	Hard-wired flexible CTs	Hard-wired flexible CTs	Hard-wired flexible CTs	Hard-wired flexible CTs						
Current Range	5 to 1000A	5 to 1000A 15 to 3000A 5 to 1000A 15 to 30								
Resolution	0.1A 0.25A 0.1A 0.25A									
Accuracy	$\pm 1\%$ of Reading $\pm 1.5A$									
Sample Rate	64 samples/cycle									
Storage Rate	Programmable from 250ms to 12 hours									
Storage Technique	Stop when full, FIFO, and Extended Recording Mode (XRM <sup>™</sup> )									
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 Four 1.5V C AC power/rechargeable AC power Alkaline batteries Alkaline batteries NiMH batteries NiMH									
Battery Life*	100 hours to 45 days 100 hours to 45 days Power ride through 10 hours Power ride through 10									
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 8	5% RH							
SAFETY										
Safety Rating		600V Cat. III,	300V Cat. IV							
Double Insulation 🔲		Y	es							
*Dependent on sample rate										

\*Dependent on sample rate.



Model SDL A302 three-channel current logger monitoring lighting loads.



### Construction



USB cable is included with all

Sentinel® Data Loggers

120V US wall charger is included with Models SDL A303 & SDL A304



# DataView®

### DataView<sup>®</sup> 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<sup>®</sup>98/2000/ME (256MB recommended)



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

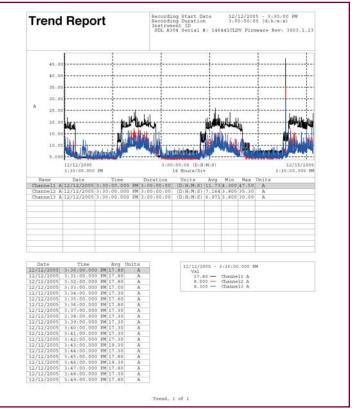
\*Real-time data is not stored in the logger, but can be stored in your PC on demand.



DataView<sup>®</sup> is included with all Sentinel<sup>®</sup> Loggers



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



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



### **Dataview Displays**

nfigure Instrument								
ecording Format								
				Set Recording	g Duration:			
Storage rate:	Recording Start:	Recording End:	1 Min	2 Min	5 Min	10 Min		
	11-28-2005 💌	11-30-2005 💌	15 Min	30 Min	1 Hour	2 Hours		
6 Seconds 🔄	2:30 PM ÷	2:30 PM ÷	3 Hours	4 Hours	8 Hours	12 Hours		
Schedule	Now		1 Day	2 Days	3 Days	1 Week		
<ul> <li>Recording</li> </ul>			2 Weeks	3 Weeks	4 Weeks	8 Weeks		
	<ul> <li>Give recording st</li> </ul>	torage rate priority		Apply & Start F	Recording Now			
	C Give recording d	uration priority	Apply & Start Recording Synchronized					
© Start/Stop © FIFO © XRM					983039	bytes e Memory: bytes d Memory:		
		<u>R</u> ecall D		Load Configuration from File				
He-Read F	rom Sentinel	<u>D</u> ownload/[	Jelete Data		Save Configuration to File			

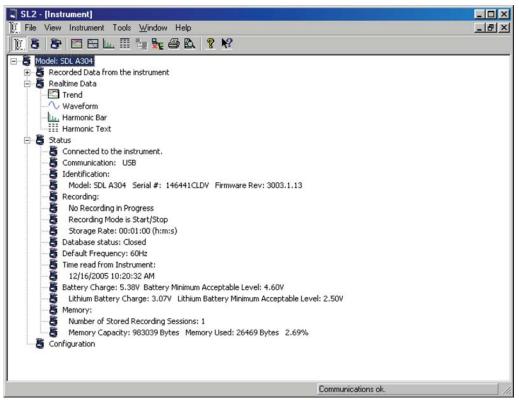
Tabbed configuration dialog boxes allow for easy setup of all recording functions.

1 2 3 4	Storage Rate: 15 s 15 s 15 s	6/4/05	2:59:13 PM		
3 4 5	15s 15s			6/7/05 9:04:43 AM	
3 4	15 s		9:10:17 AM	6/7/05 9:10:17 AM	
4		6/7/05	9:23:00 AM	6/7/05 11:23:30 AM	
	2 s	6/7/05	11:25:00 AM	6/7/05 2:07:52 PM	
	5 s	6/7/05	2:10:00 PM	6/7/05 2:57:25 PM	
6	2 s	6/7/05	3:05:00 PM	6/7/05 5:13:00 PM	
	2 s	6/8/05	8:13:00 AM	6/8/05 9:05:20 AM	
	6 s	6/8/05	10:04:39 AM	6/8/05 10:05:33 AM	
9	6 s	6/8/05	10:08:00 AM	6/8/05 10:14:24 AM	
	15 s	6/8/05	10:16:00 AM	6/8/05 11:57:00 AM	
11	2 s	6/8/05	11:59:00 AM	6/8/05 6:11:12 PM	
12	6 s	6/9/05	1:30:46 PM	6/9/05 1:30:46 PM	
13	6 s	6/18/05	4:19:04 PM	6/18/05 4:19:52 PM	
14	6 s	6/18/05	4:22:13 PM	6/18/05 4:29:01 PM	
15	Recording in Progress	6/18/05	4:29:05 PM	Recording in Progress	

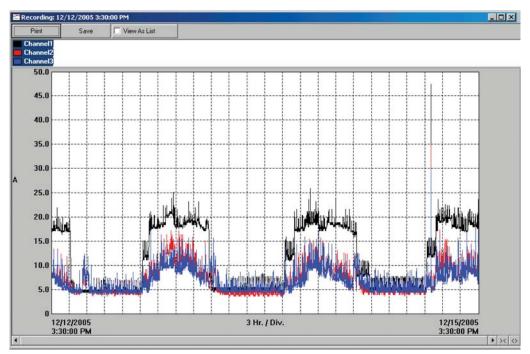
Recorded data dialog box allows clear and easy access to all stored data sessions in the Sentinel® data logger. You can choose an individual session or all sessions to download.



### **Dataview Displays**



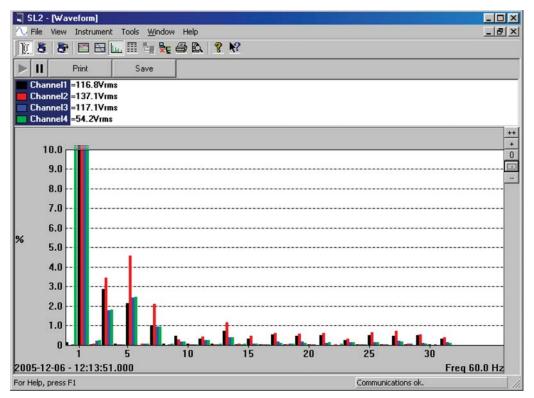
Clear and easy-to-read status update is displayed when DataView<sup>®</sup> and Sentinel<sup>®</sup> Loggers connect. From this menu you can view real-time data, download recorded data and configure the Sentinel<sup>®</sup> Logger.



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.

Wav	eform														
> II	P	rint	Save												
	nnel1 =40.														
	nnel2 =1.7														
Char	nnel3 =2.0					0.1			01			01			
	%		%			%	1100	00.4	%	110.4	0.7	%	1105	00 F	%
HOO			100.0	H02			H03			H04			H05		
	0.4		21.0	HO8	1.1			13.6		H10	1.0		H11		
	0.6		10.8	H14	0.1		H15			H16	0.7		H17		
	1.4		6.7	H20	0.4		H21	6.8		H22	0.4		H23		
	1.0	H25		H26	0.7		H27	5.3		H28	0.8		H29	6.6	
про	1.0	H31	6.7												
		1.10.12	00 414											-	
4164	2005 - 1	1:10:13.0	IUU AM											Fr	eq 60.0

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





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### **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 850Vpc	0 to 850Vpc	-	_	-	-	_	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 <sup>®</sup> software, batteries, user manual	Three hard-wired flexible CTs, DataView <sup>®</sup> software, batteries, user manual	Three hard-wired flexible CTs, DataView <sup>®</sup> software, batteries, 120V wall charger, user manual	Three hard-wired flexible CTs, DataView <sup>®</sup> software, batteries, 120V wall charger, user manual	DataView® software, batteries, 120V wall charger, user manual	DataView <sup>®</sup> software, batteries, 120V wall charger, user manual

### **ORDERING INFORMATION**

#### CATALOG NO.

Sentinel® Current Logger Model SDL A301 (3-Channel, 1000Aac, 24" AmpFlex® attached, four C-cell batteries)	. Cat. #2134.15
Sentinel® Current Logger Model SDL A302 (3-Channel, 3000AAc, 24" AmpFlex® attached, four C-cell batteries)	. Cat. #2134.16
Sentinel® Current Logger Model SDL A303 (3-Channel, 1000Aac, 24" AmpFlex® attached,	
rechargeable NiMH batteries, 120V US wall charger)	. Cat. #2134.17
Sentinel® Current Logger Model SDL A304 (3-Channel, 3000AAc, 24" AmpFlex® attached,	
rechargeable NiMH batteries, 120V US wall charger)	. Cat. #2134.18
Accessories (Optional)	
Set of one black and one red leads with alligator clips	. Cat. #2118.51
Banana (Female) – BNC (Male) Adapter (XM-BB)	
Bag – Large Classic Tool Bag.	. Cat. #2133.71





### **Contact Us**

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