

SP MAX

ELECTRICAL ENERGY PROFILE LOGGER



Features

- ✓ True RMS Measurements
- ✓ 12 Bit Resolution
- ✓ $\pm 0.25\%$ Accuracy
- ✓ Measure 3 current, 1 voltage, 1 power factor, 1 dry contact pulse input.
- ✓ Downloads with Sp PowerPack software



Applications

- ✓ Energy Studies
- ✓ Industrial Monitoring
- ✓ Machinery and motor analysis
- ✓ HVAC studies
- ✓ Electrical Utilities
- ✓ Peak shaving and Load Management

	Specification	Notes
Maximum Channels	6	Selectable storage for each channel.
Range	Channel 1 0 - 275 VAC Channel 2 0 - 1 VAC - Current CT Input Channel 3 0 - 1 VAC - Current CT Input Channel 4 0 - 1 VAC - Current CT Input Channel 5 0 - 180° Channel 1 to Channel 2. Channel 6 Pulse input from dry contacts	True RMS for 50/60 Hz. operation. Pulse input is used for dry or voltage free contacts only. Other voltage ranges available - contact Northwood for details. Power factor calculated via software (cos θ).
External Connections	Aux. power, download, 3 current, 1 voltage, 1 pulse	
Sensor Type	External CT's, internal impedance network for voltage .	
Sampling Rate	¼ second.	Set via Silent Partner software.
Storage Rate	1 second to 15 mins.	Set via Silent Partner software.
Parameters Stored	Avg, Min/Max, or Min/Max/Avg.	Set via Silent Partner software.

Memory	512K, non-volatile RAM.	
Memory Treatment	Stop when full, or wrap.	Set via Silent Partner software.
Storage Capacity	15 days for 5 channels, min/max/avg, 1 minute storage.	Storage available depends on number of channels and storage mode.
Indicators	LED's for: Line Power, Over/Under/Phase, Overcurrent	
Power	Line Power, Internal battery, external adapter.	Internal battery recharged via line or external adapter.
Battery Life	14 Days (can also operate from external adapter).	
Communications	Opto-isolated RS232, support for remote setup.	
Software	Silent Partner for Windows.	Requires PC running Windows 3.1 or greater and 1 free serial port.
Packaging	Rugged, durable ABS.	
Accuracy	$\pm 0.25\%$ Range + CT error	
Safety	Optically isolated download	
Operating Temperature	- 40°C to 60°C	

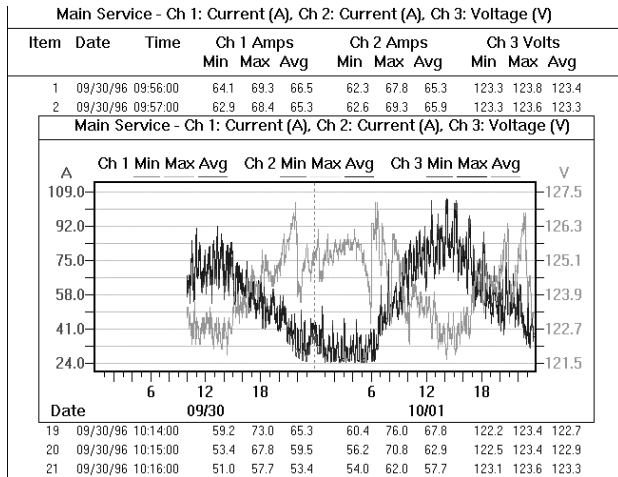
Specifications Subject to Change Without Notice

SP PowerPack Software - Simple, Easy, Powerful

SP PowerPack allows you to download, save, retrieve and analyze the data collected with the Silent Partner Plus. The software will run on any PC running Windows 3.1 or greater with 1 free serial port for data transfer.

Software Features

- W95/98/NT
- Full colour printer support.
- Built-in export to WK1 spreadsheet translation.
- Allows you to import a bitmap file so you can include your company logo on printed reports.
- One Silent Partner software can download any logger in the Silent Partner family.
- View your data in graphical form or view the actual numerical data in tabular form.



- View graphs in 1 hour, 1 day, 1 week or 1 month increments
- View up to 9 traces on a single graph - Min, Max, and

Graph/Print Options

Graph, Print List Length

1 Hour
1 Day
2 Days
5 Days
7 Days
30 Days

Overview Graph Style

Shaded Blocks
 Cross Hatches

Measurement Y-Axis

Single
Dual - Left/Right

Trace Selections

Ch1 (A) Min Max Avg
Ch2 (A) Min Max Avg
Ch3 (A) Min Max Avg

All On

OK Cancel

Average for all 3 channels.

- Enable and disable individual traces to remove on-screen clutter.
- Graphs can be configured to display a single or dual Y-axis.
- Zoom feature allows you to view graphs in maximum detail.

- Scale your data using multipliers to implement CT or PT ratios. This enables you use CT's and PT's with different primary to secondary ratios.

xT1 Ratio Selection

xT1 1000 A : 1000 mV

OK Cancel

- The Survey Summary gives you concise statistics about your data in one compact report.
- The Notes box allows you to enter information about the test site, particulars of the hookup, contact names, etc.

Survey File Summary

Survey Name: Test Panel #1

Logger Type: SPPlus

Logger Version: 1.17

Start Time: 09/11/96 20:52:38

End Time: 09/11/96 22:04:06

Duration: 0 days 01:11:28

of Records: 135

Channel 1: 10.1 to 1250.0 (Amps)

Channel 2: 10.1 to 1250.0 (Amps)

Channel 3: 0.0 to 1231.7 (Amps)

Range: 1000 A

Notes:

Survey at Test Panel #1.

OK Cancel

- Software indication of low battery voltage in the Silent Partner Plus logger.
- All setup of sampling rate/storage interval, time and channel configuration is done via software.