

PowerLyzer

Discovering all of life's little power problems



PowerLyzer is a ...

Power Meter. It is intended for use with Residential and Industrial Voltages from **120 to 480 VAC**. Using **Current Clamps**, it reads currents either directly or from metering CT wires.

Reads 1, 2 or 3 phase:

Voltage
Current
kW and kWh
kVAr and kVArH
kVA
Phase Angle
Power Factor
Line Frequency

Voltage Configurations:

120 Single Phase
120/240 Split Phase
120/208 Y
240 Y
240 4 Wire Delta
240 Corner Gnd Delta
277/480 Y
480 Corner Gnd Delta

Power Quality Monitor. It records **Blinks** and **Brown-outs** and keeps 3 types of **Min-Max** information. It also captures voltage and current waveforms and calculates **Harmonics** out to the 63rd.

Trend Recorder. It stores the values listed above in **15, 5, 2, or 1 Minute Intervals**. Working with the Valquest PowerLyzer Software, it is able to present user formatted graphs and tables. Recording capacity depends on Voltage Configuration and Recording Period. It ranges from 5 days to 682 days.

PowerLyzer

from Valquest Systems, Inc.

Features

Parameter Measurement

	Range	Resolution
Voltage	0 to 550 VAC	+/- 0.2%
Current	0 to 9999 Amps	+/- 0.5%
Blink Voltage	0 to 108 VAC	+/- 2.0%
Blink Duration	½ to 4 Sec	½ Cycle
Power Loss	4 Sec or Greater	1 Second
Blink / Power Loss Storage	200 Events	
Phase Angle	0 to 359.5°	+/- 0.5°
KW	-9999 to +9999 kW	+/- 0.5%
KVAr	-9999 to +9999 kVAr	+/- 0.5%
KVA	0 to 9999 kVA	+/- 0.5%
Power Factor	- 0.5% to +0.5%	+/- 0.5%
Line Frequency	50Hz or 60Hz	+/- 0.02 Hz
Phase Rotation	ABC or ACB	
Harmonics	1 st through 63 rd	

Recording

	Parameters
Trend Parameters	Voltage, Current, Neutral, Phase Angle
Derived Parameters	KW, kVAr, kVA, Power Factor
Number of Measured Phases	1, 2, or 3
Trend Period (Minutes)	15, 5, 2, 1
Max Records	65536
Blink / Power Loss Storage	200 Events
Min-Max Voltage Storage	4 Cycle, 4 Second, 1 Minute

PowerLyzer can help with:

- * voltage blink complaints
- * voltage level complaints
- * power usage complaints
- * billing complaints
- * kWh meter accuracy verification
- * power factor correction
- * harmonic analysis
- * load profiling

PowerLyzer is cool because:

- * the display and controls are easy to use.
- * record mode is set up from the Front Panel.
- * it can monitor virtually any configuration.
- * it works with most Current Clamp brands.
- * the PC software makes graphs and tables.
- * it's small, rugged and light weight.
- * it records Mins & Maxes and catches blinks.
- * it doesn't cost an arm and a leg.

Environmental Specifications

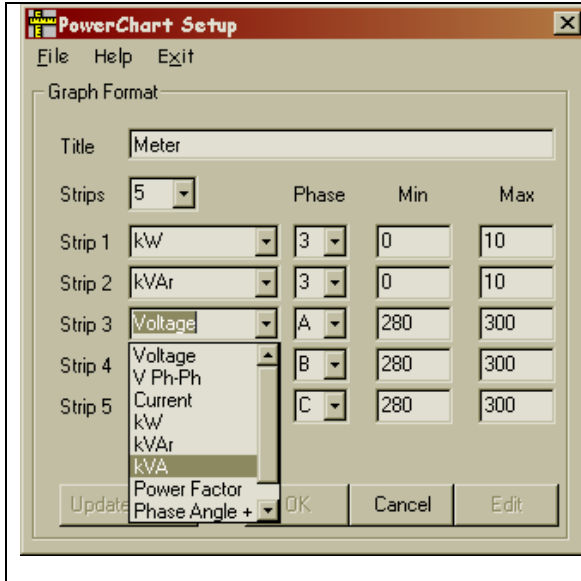
Condition

	Range
Operating Temperature	-40°F to 165°F
Humidity (Non-Condensing)	0 to 100%
Operating Voltage	95 to 530 VAC
Input Measurement Current Range	0 to 1000 mA
Power Usage	½ Watt
Enclosure	Nema 4

PowerLyzer

Companion Software

Trending Strip Chart Selections



Power Chart Setup

Trending strips can be set up in any combination of electrical parameters desired.

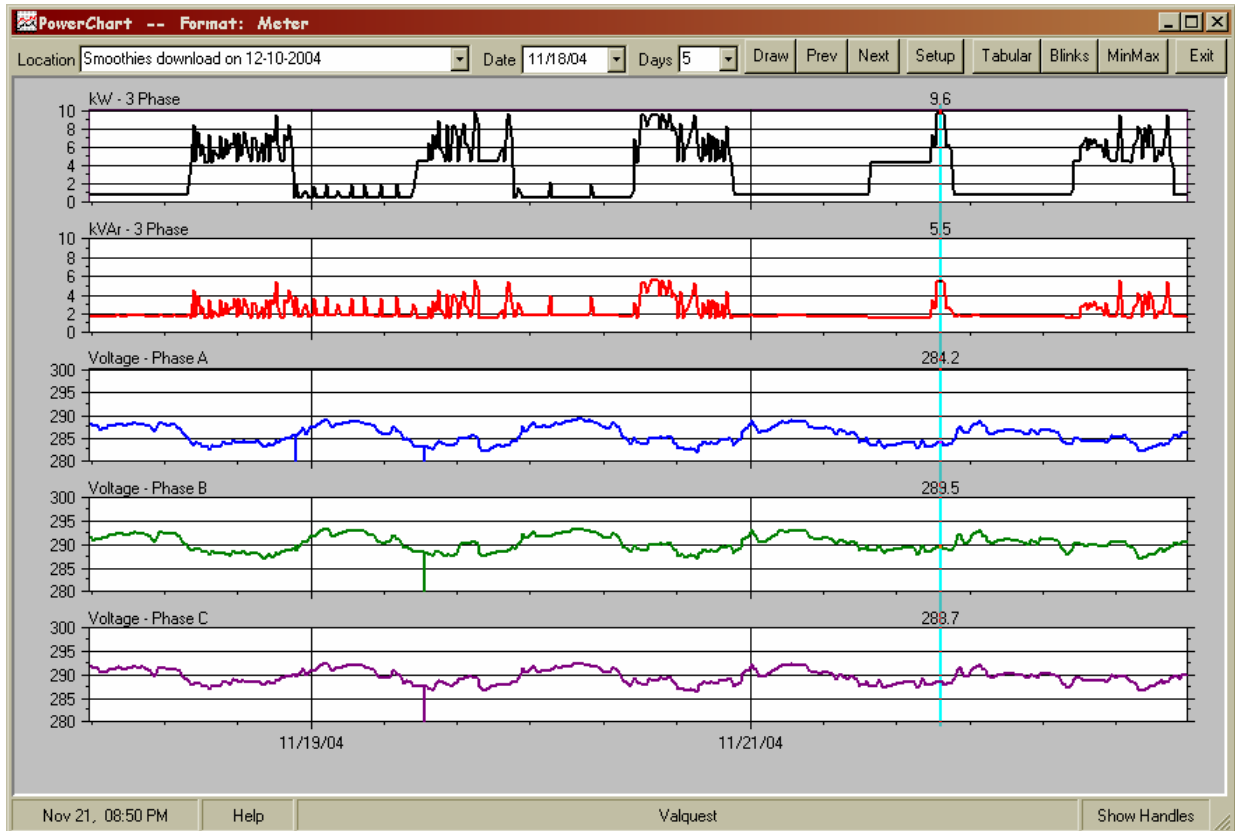
A, B, C, or 3 phase information may be selected.

Neutral current is also available.

Upper and lower limits for each strip are completely variable.

Each combination can be saved as a separate Format file for later use with fresh data.

Comprehensive Help screens are always available.



PowerLyzer

Companion Software

Trending Strip Chart

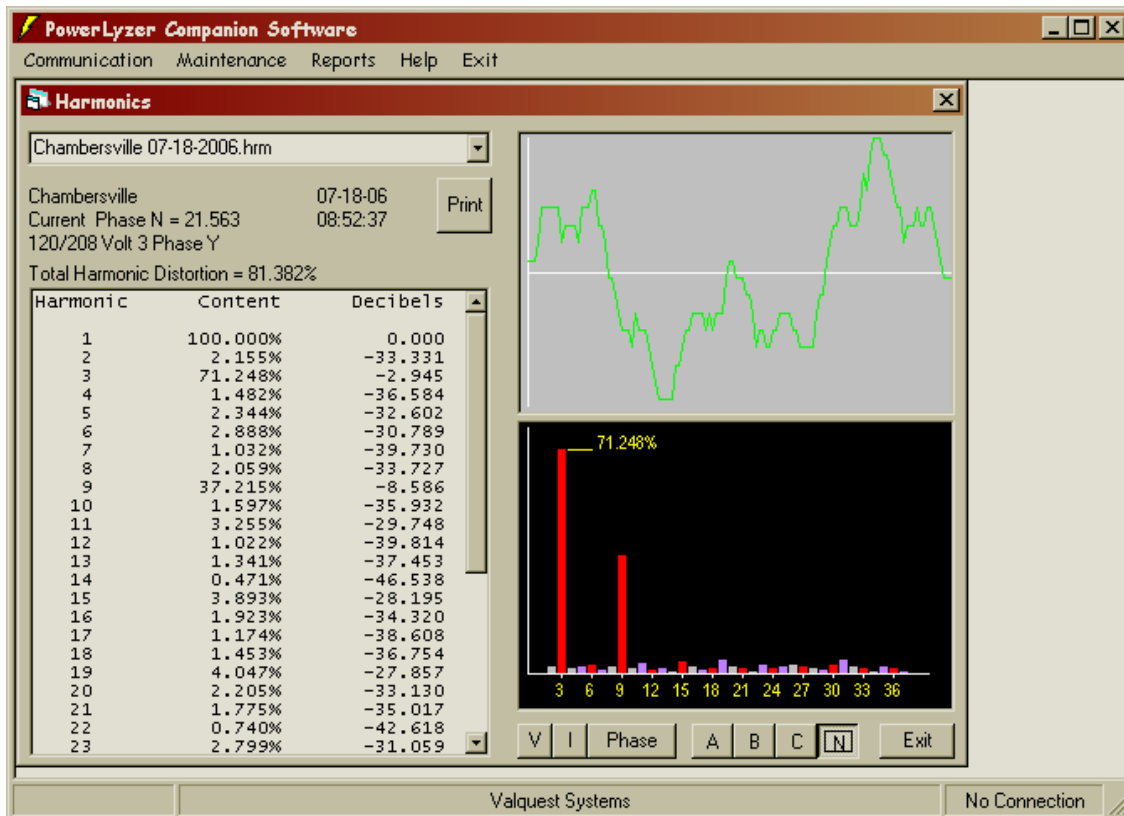
Sample Data showing a stripchart. Note the presence of the blinks. One is on Phase A only. The others appear on all three phases.

The actual numeric values for the blinks are shown in the tabular report below.

Beginning Time		Minimum Voltage			Average Voltage			Duration	
Date	Time	A	B	C	A	B	C	Cycles	Seconds
11-18-04	22:24:32	3.5	288.7	289.9	27.1	288.7	289.9	7.0	0.117
11-18-04	22:24:35	8.2	289.9	289.9	60.1	289.9	289.9	7.5	0.125
11-19-04	12:31:38	0.0	0.0	0.0	4.7	9.4	8.2	23.0	0.383

All trend data can be shown and printed in tabular reports or built as a Microsoft Excel file. In addition a comprehensive Voltage Min-Max report is also generated.

Oscillography



Neutral current waveform showing strong 3rd and 9th harmonics