

# PowerLyzer

## Specifications

### 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	1/2 to 4 Sec	1/2 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	50 Hz or 60Hz	+/- 0.02 Hz
Phase Rotation	ABC or ACB	
Harmonics	1st through 63rd	

### Recording

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

## Environmental Specifications

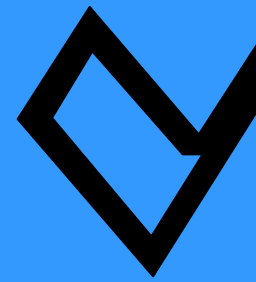
### Condition

	Range
Operating Temperature	-40° F to 165° F
Humidity (Non-Condensing)	0 to 100%
Operating Voltage	95 to 530 VAC
Current Input Measurement Range	0 to 1000 mA
Power Usage	1/2 Watt
Enclosure	Nema 4

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**VALQUEST**  
SYSTEMS, INC.

### 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

### Reads 1, 2 or 3 Phase:

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

### Power Quality Monitor:

Records **Blinks, Brown Outs** & keeps 3 types of **Min-Max** information. The Powerlyzer also captures Voltage & Current waveforms & calculates **Harmonics** out to the **63rd** per Phase.

### Trend Recording:

Records in **1, 2, 5 or 15 minute intervals**. Recording capacity depends on voltage configuration & recording period. It ranges from **5 to 682 days**.

# PowerLyzer

## Power Analyzer, Trend Recorder & Test Meter

## Power Quality Meters For Industrial, Commercial & Residential Applications



### PowerLyzer Can Help With:

Voltage Blink Complaints	Power Factor Correction
Voltage Level Complaints	Harmonic Analysis
Power Usage Complaints	Load Profiling
Billing Complaints	
kWh Meter Accuracy Verification	

## Residential Meter Base Power Quality Recorder

### The PowerLyzer MB

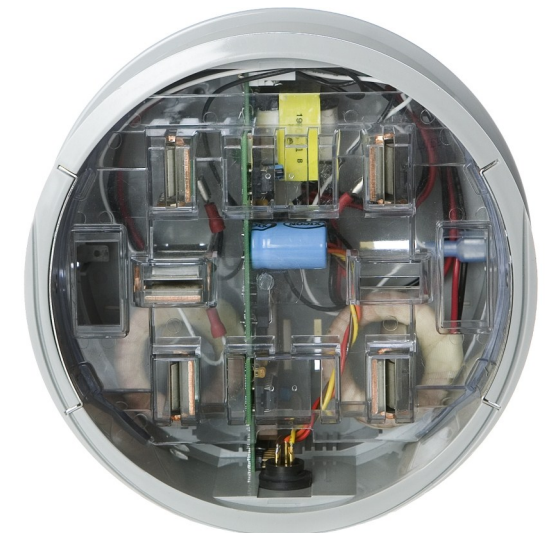
#### Voltage Configuration:

120/240V Three Wire Single Phase

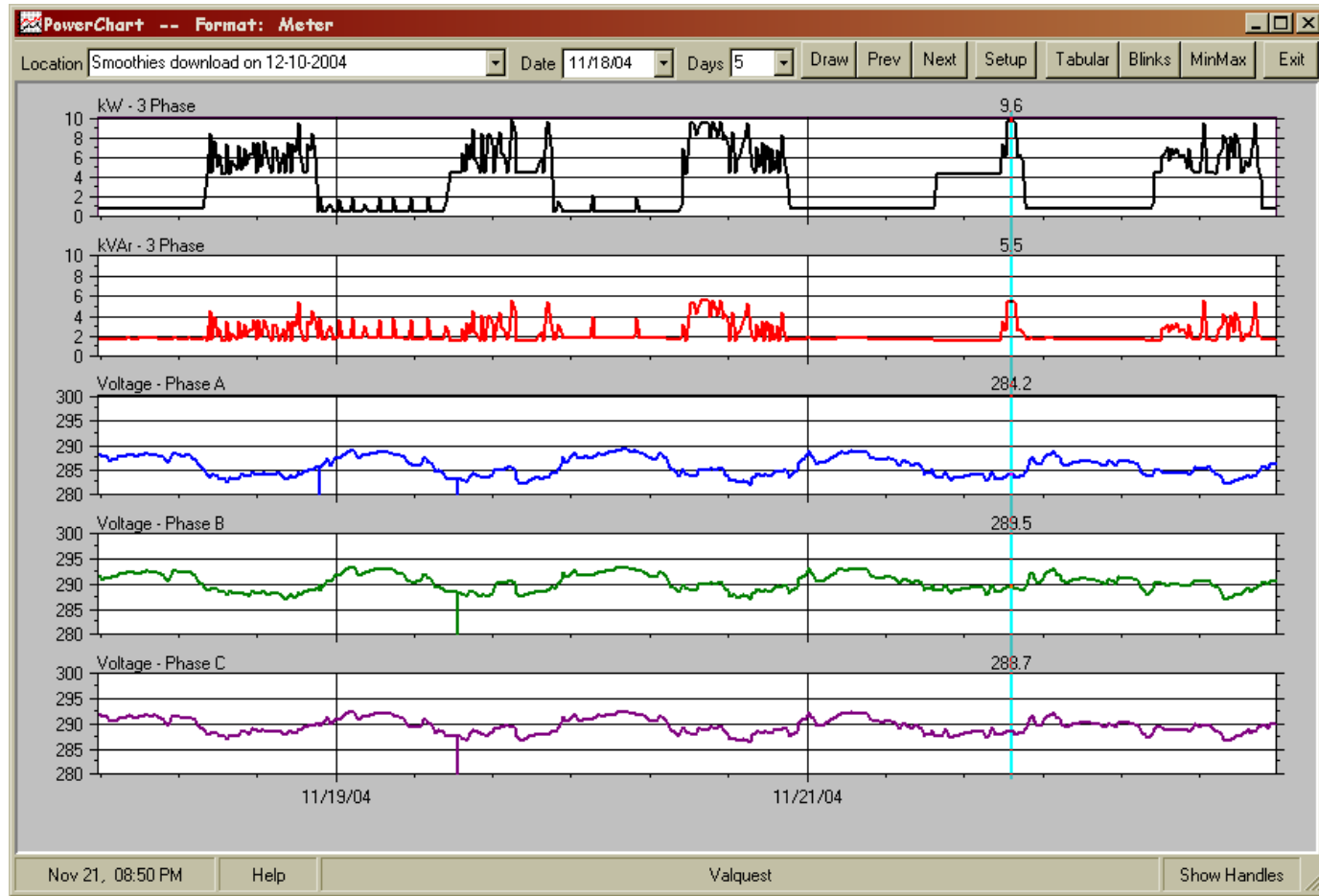
#### Reads 2 Phases:

Voltage, Current, kW & kWh, kVAr & kVArH, kVA, Phase Angle, Power Factor & Line Frequency.

This Meter Base recorder is intended for use with Residential voltages and meters. It uses the same Powerlyzer Companion Software and has all of the same features and resolution.



**Trending**



**Trending Strip Chart**

Sample Data showing several strips. Note the presence of blinks. One is on A Phase only. The others appear on all three Phases.

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

**Note:** All trend data can be shown and printed in tabular or built as a Microsoft Excel file.

In addition, a comprehensive Voltage Min-Max report is also generated.

Valquest Systems

Power Interruption Report

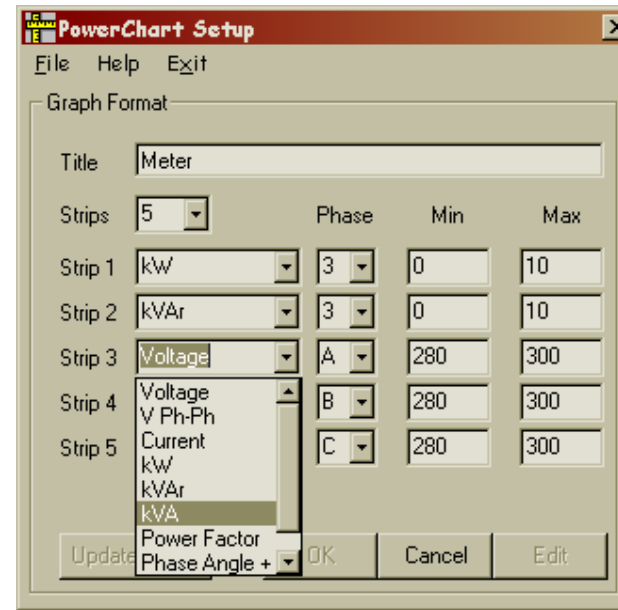
Download Date: 12-10-2004

Location: Smoothies

Configuration: 277 / 480 Y

Beginning		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

**Strip Chart Selection**



**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.

**Oscillography**

**Note:** Neutral current waveform showing strong 3rd and 9th harmonics.

