

ELECTRONICS PRODUCTS > ENERGY MANAGEMENT PRODUCTS > ENERGY ANALYZERS



## POWYS 3122

**Stock Keeping Unit (SKU):** 606307

*Energy Analyzer*

### Commercial Information

Product Sales Code	<b>606307</b>
Package Unit	<b>1 pcs.</b>
Customs Tariff Number	<b>902830900011</b>
Weight Per Unit Including Packaging	<b>0.34 kg.</b>

### Technical Information

General	
Lcd Screen	<b>+</b>
Language Support	
Password Protection	<b>+</b>
Voltage Transformer Ratio Vtr	<b>1 - 5000</b>
Current Transformer Ratio Ctr	<b>1 - 5000</b>
Number Of Measurements In One Period	<b>256</b>
Lcdscreen Refresh Rate	<b>1 sn.</b>
Networks	<b>TT, TN, IT</b>
Signal Waveforms	
Connection Type	<b>3F4T, 3F3T, Aron</b>
Battery	
Real Time Clock	
Four Quadrant Measurement	<b>+</b>

Demand Period	<b>1-60 min. adjustable</b>
Phase Diagram	
Minmaxdemand Values	<b>+</b>
Protection Class	<b>IP20</b>
Weight G	<b>340</b>
Mounting Type	<b>Rail Mounted</b>
Seven Segment Display	

### Energy Measurement

Multiple Sub Tariffs Peak On Peak And Off Peak	
1 Phase Energy Measurement	<b>+</b>
3 Phase Energy Measurement	<b>+</b>
4 Quadrant Reactive Energy Measurement	
Number Of Tariffs	<b>2</b>

### Current Measurement Input

Measuring Range	<b>10mA - 6A AC</b>
Overvoltage Category	<b>300 V Cat II</b>
Voltage Fluctuation Measurement	<b>2 kV</b>
Power Consumption	<b>&lt;0.2 VA</b>
Intermittent Overload	<b>100 A for 1 sec</b>
Sampling Frequency Between 45 65 Hz	<b>12,8 kHz</b>

### Voltage Measurement Input

Overvoltage Category	<b>300 V Cat III</b>
Measuring Range L N	<b>1-300 Vrms</b>
Measuring Range L L	<b>2-500 Vrms</b>
Frequency Measuring Range	<b>45-65 Hz</b>
Power Consumption	<b>&lt;0.1 VA</b>
Sampling Frequency Between 45 65 Hz	<b>12,8 kHz</b>

### Power Quality Measurements

Thd Voltage As	<b>+</b>
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Thd Current As	+
Harmonics For Current And Voltage Phases	<b>Up to 31st</b>

### Measuring Accuracy Iec 61557 12

Total Active Power	<b>Class 0.5</b>
Total Reactive Power	<b>Class 1</b>
Total Reactive Energy	<b>Class 2</b>
Frequency	<b>Class 0.1</b>
Current	<b>Class 0.5</b>
Neutral Current	<b>Class 0.5</b>
Voltage	<b>Class 0.2</b>
Power Factor	<b>Class 0.5</b>
Thdv Thdi	<b>Class 1</b>
Total Apparent Power	<b>Class 0.5</b>
Total Active Energy	<b>Class 0.5</b>

### Measuring Accuracy Iec 62053 22

Total Active Energy	<b>Class 0.5S</b>
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### Measuring Accuracy Iec 62053 23

Total Reactive Energy	<b>Class 2</b>
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### Alarm Relay Outputs

Number Of Outputs	
Type	
Max Switching Current	
Max Switching Voltage	
Max Switching Power	

### Power Supply

Voltage	<b>85-300V AC / 85-300V DC</b>
Frequency	<b>45-65Hz</b>
Consumption	<b>&lt;4.5VA AC / &lt;2VA</b>

## Environmental Conditions

Operating Temperature	<b>-20 to +70°C</b>
Storage Temperature	<b>-30°C +80°C</b>
Relative Humidity Non Condensing	<b>Max. 95%</b>

## Emc Emi

300 Vac Cat II According To IEC 61010 1	
EN 55011A1	<b>2010, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11</b>

## Diagrams

Mains Connection	
Digital I/O And Alarm Output Connections	
3 Wires With 3CT	
4 Wires With 3CT	
3 Wires With 2CT Note	<b>CTs can be connected to any phase. In the figure, they are connected to Phase-1 and Phase-3.</b>
Single Phase With 1CT Note	<b>CT and VT can be connected to any phase. In the figure, they are connected to Phase-1.</b>
Digital Output Connection	
Digital Input Connection	
Alarm Output Connection	
Analog Output Connection	

## Communication

Protocol	<b>Modbus RTU</b>
Baud Rate	<b>1200-57600 bps adjustable</b>
Parity	<b>Odd, Even, None</b>
Stop Bit	<b>1</b>
Slave Id	<b>1-247</b>
Isolation	<b>2750V RMS</b>

## Time Recorded Data Storage

Hourly Records	
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Daily Records	
Monthly Records	
Demand	
Alarm Records	

### Digital Output

Isolation Level	<b>5000 Vrms</b>
Number Of Outputs	<b>2</b>
Type	<b>Transistor</b>
Voltage Switching Range	<b>5-30 VDC</b>
Minimum Switching Frequency	<b>20 Hz, 50 ms</b>

### Digital Input

Number Of Inputs	<b>2</b>
Isolation Level	<b>5000 Vrms</b>
Minimum Counting Frequency	<b>100 Hz, 10 ms</b>
Input Type	<b>Dry Contact</b>

### Analog Output

Number Of Outputs	
Output Ranges 0 5 V 0 10 V 5 5 V 10 10V 0 20 Ma 4 20 Ma	
Isolation	

### Cable Cross Sections Power Supply Voltage Current Relay Outputs

Loaded	<b>2.5mm<sup>2</sup> - 14AWG</b>
Unloaded	<b>4mm<sup>2</sup> - 12AWG, 2x1.5mm<sup>2</sup> - 2x16AWG</b>

### Cable Cross Sections Digital I/O RS485 Analog Outputs

Loaded	<b>1.5mm<sup>2</sup> - 16AWG</b>
Unloaded	<b>1.5mm<sup>2</sup> - 16AWG, 2x0.75mm<sup>2</sup> - 2x18AWG</b>

### Other Measurements

Operating Hours Operating Time Under Load	<b>+</b>
Open Time Open Time Without Load	<b>+</b>

Interruption Counter Number Of Power  
Interruptions

+

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