SD card real time data recorder, CAT IV 600 V

CLAMP POWER ANALYZER

Model : PC-6011SD *ISO-9001, CE, IEC1010*

Micro SD card
(8GB, included)

Carrying case (included)

Lutron

LUTRON ELECTRONIC

The Art of Measurement

SD Card real time data recorder

CLAMP POWER ANALYZER

Model : PC-6011SD

FEATURES

* Power quality analyzer for single-phase or balanced three-phasesystem.
* Voltage and Current are the True RMS value.
* ACV input impedance is 10 Mega ohms.
* True Power (KW、MW、GW) measurement.
* Apparent Power (KVA、MVA、GVA) measurement.
* Reactive Power (KVAR、MVAR、GVAR) measurement.
* Power Factor (PF)、Phase Angle (Φ) measurement.
* Energy (KWh、KVAh、KVARh、PFh) measurement.
* Voltage measurement range: 10 to 600 ACV.
* Current measurement range: 5 to 2000 ACA.
* Graphic Phasor Diagram.
* Voltage and Current harmonic analysis (1-50th order).
* Voltage and Current Total Harmonic Distortion analysis (THD) measurement.
* Voltage and Current waveforms show.
* Peak-to-Peak voltage and current measurement.
* Capture Transient events (including Dip, Swell and Outage) with programmable threshold (%).
* Thermocouple Temp. sensor:Type K (-100.0℃ to 199.9℃/200℃ to 1300℃),℃/℉.
* Programmable PT ratio (1 to 1000).
* Safety Standard : IEC 1010, CAT IV 600V.
* Built-in clock and Calendar, real time data record with SD memory card , sampling time set from 2 to 7200 seconds. Just slot in the SD card into the computer, it can down load the all the measured value with the time information (year, month, data, hour, minute, second) to the Excel directly, then user can make the further data analysis by themselves.
* Allow save the LCD screen picture to the photo BMP file, it is the useful tool for the user to make the further analysis.
* Micro SD CARD 32 GB maximum supported capacity.
* Powered by AA (UM-3) DC 1.5 V X 2 batteries (Alkaline type) or DC 9V adapter (linear 110V/220V).
* Computer data output, can cooperate with optional USB Cable/USB-01, RS232 cable/UPCB-02 and Data Acquisition software, SW-U811-WIN.
* Optional type K probe: TP-11.

GENERAL SPECIFICATIONS

Circuit	Custom single-chip microprocessor LSI circuit	
Display	LCD Size: 3.2 X 2.4" (60 X 44.4 mm) Dot Matrix backlit LCD (128 X 64 pixels)	
Measurements	ACV ACA KW / KVA/ KVAR/ PF KWH/KVAH/KVARH/PFH Power factor Phase angle Frequency Harmonics display Temperature	
Wire configurations	1 Phase, 3 Phase	
Voltage ranges	10 ACV to 600 ACV (Auto Range)	
Current ranges	5 ACA to 2000 ACA (Auto Range)	
Safety standard	IEC1010 CAT IV 600 V	
ACV input impedance	10 M ohms	
Clamp frequency response	40 Hz to 1 KHz	
Tested clamp	45 to 65 Hz	
Over-load protection	ACV	720 ACV RMS
	ACA	2100 ACA with clamp probe
Over-range	* LCD display show " OL ". * The data save into the SD card will show " 9999 " or " 999 " (overleap the decimal point).	
Data Hold	Freezes displayed reading	
Datalogger	* Real time data logger, saved the data into SD memory card and down load the all the measured value with the time information (year/month/data/ hour/minute/second) down load to the Excel. * Sampling time for data logger : 2 seconds to 7200 seconds, the during of setting step are 2 seconds * Data error no. : ≦ 0.1% no. of total saved data typically.	
ta Recording	Micro SD memory card	
mpling Time	Approx. 1 second	

Data Output USB/RS232	* Computer interface * Connect the optional USB cable USB-01 will get the USB plug. * Connect the optional RS232 cable UPCB-02 will get the RS232 plug.
Operating Temperature	0 to 50℃ (32 to 122℉).
Operating Humidity	80% Relative Humidity max.
Power Supply	* DC 1.5V, AA (UM-3) Battery X 2 PCs (Alkaline or heavy-duty battery). * AC to DC 9V power adapter (LINEAR 110/220V)
Power Consumption	60 mA DC
Max. Conductor size	Clamp can accommodate up to 2.2" (57 mm) diameter
Dimensions	11.0 X 4.2 X 1.9" (280 X 106 X 47mm) Clamp Jaw: 3.5" (90 mm)
Accessories Included	Instruction manual..... 1 PC 8 GB micro SD card..... 1 PC Test Leads.....1 set Alligator clips.....1 set AC to DC 9V adapter (linear 110V/220V).....1 PC Carrying case.....1 PC

ELECTRICAL SPECIFICATIONS (23± 5 ℃)

ACV

Range	Resolution	Accuracy
10 to 600 V(RMS)	0.1 V	± (0.5%+3d)
Peak to Peak		± (5%+30d)

ACA

Range	Resolution	Accuracy
10.00A to 2000A	0.01A * < 100A	± (1%+0.5A)
	0.1A * ≦100A and < 1000A	≦ 200A
	1A * ≧ 1000A	± (5%+5A)
		> 200A
Peak to Peak		± (5%+30d)

Power factor

Range	Resolution	Accuracy
0.00 to 1.00	0.01	± 0.04

Φ (Phase angle)

Range	Resolution	Accuracy
-180° to 180°	0.1°	± 1° *ACOS(PF)

Frequency

Range	Resolution	Accuracy
45 to 65 Hz	0.1 Hz	± 0.1 Hz

Active/Apparent/Reactive POWER

Range	Resolution	Accuracy
0.0 to 1.8M (W/VA/VAR)	0.001K-0.001M(W/VA/VAR)	± (1.5%+20d)

Active/Apparent/Reactive POWER Hour:(WH/SH/QH)

Range	Resolution	Accuracy
0.000K to 9.9999M (WH/VAH/VARH)	0.001K to 0.001M (W/VA/VARH)	± (1.5%+20d)

Harmonics Magnitude (Harmonic Level > 5% , Freq:50/60 Hz)

	Range	Resolution	Accuracy
ACV	1 to 20th	0.1V	± (2%+5d)
	21 to 50th		± (4%+5d)
ACA	1 to 20th	0.1A to 1A	± (2%+5d)
	21 to 50th		± (4%+5d)

Harmonics Percentage (Harmonic Level > 5%, Freq:50/60 Hz)

	Range	Resolution	Accuracy
ACV	1 to 20th	0.1 %	± (2%+10d)
	21 to 50th		± (4%+20d)
ACA	1 to 20th	0.1 %	± (2%+10d)
	21 to 50th		± (4%+20d)

Total Harmonic Distortion

Range	Resolution	Accuracy
0 to 20 %	0.1 %	± (2%+5d)
20.1 to 100%		± (6%+10d)

Type K Temperature

Range	Resolution	Accuracy
-100.0℃ to 199.9℃	0.1℃	± (1%+1℃)
200℃ to 1300℃	1℃	± (1%+2℃)