SD card real time data recorder, CAT IV 600 V

CLAMP POWER ANALYZER

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

www.yalab.com.tw

02-2389-0101





Micro SD card (8GB, included)



Carrying case (included)





The Art of Measurement

SD Card real time data recorder

CLAMP POWER ANALYZER

Model: PC-6011SD <u>www.YaLAB.com.tw</u> 02-2389-0101

FEATURE

- * 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 Factory (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 $^{\circ}$ C to 199.9 $^{\circ}$ C/200 $^{\circ}$ C to 1300 $^{\circ}$ C), $^{\circ}$ C/ $^{\circ}$ F.
- * 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 SPECIFICATION

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	ACV 720 ACV RMS	
	ACA	2100 ACA with clamp probe	
Over-range	*LCD displ	ay show " OL ".	
	*The data	save into the SD card will show " 9999 " or " 999 " (overleap	
	the decima	al point).	
Data Hold	Freezes dis	splayed reading	
Datalogger	*Real time	e data logger, saved the data into SD memory card and down	
	load the	all the measured value with the time information	
	(year/m	onth/data/ hour/minute/second) down load to the Excel.	
	*Sampling	time for data logger: 2 seconds to 7200 seconds, the during of	
	setting st	ep are 2 seconds	
	*Data erro	or no. : \leq 0.1% no. of total saved data typically.	
Data Recording	Micro SD r	nemory card	
Sampling Time	Approx. 1	second	
Data Output USB/RS232	*Computer interface		
	*Connect the optional USB cable USB-01 will get the USB plug.		
		the optional RS232 cable UPCB-02 will get the RS232 plug.	
Operating Temperature	0 to 50°C	(32 to 122 $^{\circ}\mathrm{F}$).	
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		
		ips1 set	
	AC to DC 9V adapter (linear 110V/220V) 1 PC		
	Carrying case 1 PC		

ELECTRICAL SPECIFICATIONS (23 \pm 5 $^{\circ}$ C)

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	\pm (1%+0.5A) \leq 200A
	0.1A * \leq 100A and < 1000A	± (5%+5A) > 200A
Peak to Peak	1A * ≧ 1000A	± (5%+30d)

Power factor

Range	Resolution	Accuracy
0.00 to 1.00	0.01	± 0.04

$\boldsymbol{\Phi}$ (Phase angle)

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

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

Active/Apparent/Reactive POWE

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	0.001K to 0.001M	± (1.5%+20d)
(WH/VAH/VARH)	(W/VA/VARH)	

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°C to 199.9°C	0.1°C	± (1%+1°C)
200 °ℂ to 1300 °ℂ	1°C	± (1%+2°C)

PC-6011SD+1503

^{*} Appearance and specifications listed in this brochure are subject to change without notice.