SD card real time data recorder, CAT IV 600 V

## **CLAMP POWER ANALYZER**

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



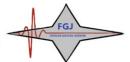


The Art of Measurement

**FGJ** 

## SD Card real time data recorder

## **CLAMP POWER ANALYZER**



Model: PC-6011SD

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FI	EATURES
*	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°C to
	199.9°C/200°C to 1300°C),°C/°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.

<b>GENERAL</b>	SPECIFICATIONS

Circuit	Custo	m single-chin	microprocessor
Circuit	Custom single-chip microprocessor		
Display			" (60 X 44.4 mm)
		latrix backlit L	.CD (128 X 64 pixels)
Measurements	ACV		
	ACA		
		KVA/ KVAR/ F	
		KVAH/KVARH	/PFH
+982165565901	Power factor		ECT NIDT ID
		angle	FGJ-NDT.IR
C +982144584619	Frequ		DICTAIDT ID
+989034119385	Harmonics display Temperature		DIGINDT.IR
Wire			
configurations	1 Pha	se, 3 Phase	
Configurations Voltage ranges	10 00	1/ to 600 AC	(Auto Range)
Current ranges			(Auto Range)
Safety		10 CAT IV 60	
standard	ILCIC	10 CAT IV 60	. · ·
ACV input	10 M	ohms	
impedance	10 1.1	Offilis	
Clamp	40 Hz	to 1 KHz	
frequency	10 112	to I Kilz	
response			
Tested clamp	45 to	65 Hz	
Over-load	ACV		IS
protection	ACA		ith clamp probe
Over-range	* LCI	display show	
	* The data save into the SD card will		
	sho	w " 9999 " or	" 999 " (overleap
	the	decimal point	t).
Data Hold		es displayed r	
Datalogger	* Rea	al time data lo	gger, saved the data
	into	SD memory	card and down load
			ared value with the time
	info	ormation (yea	ar/month/data/
	hou	ir/minute/sec	ond ) down load to the
	Exc		
			r data logger :
			00 seconds, the during
		setting step ar	re 2 seconds
		a error no. :	
			otal saved data typically.
Data Recording		SD memory of	card
Sampling Time	Appro	x. 1 second	

Data Output	* Computer interface
USB/RS232	*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 $^{\circ}$ C ( 32 to 122 $^{\circ}$ 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	Instruction manual
Included	Test Leads
	( linear 110V/220V )

## ELECTRICAL SPECIFICATIONS (23±5°C)

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

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

Range	e	Resolution	Accuracy	
0.00	to 1.00	0.01	± 0.04	
Φ (PF	nase angle)			
Range	e	Resolution	Accuracy	
-180° to 180°		0.10	± 1° *ACOS(PF)	
Freau	iency			
Range		Resolution	Accuracy	
	65 Hz	0.1 Hz	± 0.1 Hz	
Range 0.000	e K to 9.9999M	Resolution 0.001K to 0.001M	H/SH/QH) Accuracy ± (1.5%+20d)	
Range 0.000	e	Resolution	Accuracy	
Range 0.000 (WH)	e IK to 9.9999M /VAH/VARH)	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz	
Rang 0.000 (WH)	e NK to 9.9999M /VAH/VARH) nonics Magnitude   Range	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy	
Range 0.000 (WH)	ok to 9.9999M (VAH/VARH) conics Magnitude Range 1 to 20th	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy ± (2%+5d)	
Range 0.000 (WH, <i>Harm</i>	e ok to 9.9999M (VAH/VARH)  conics Magnitude Range 1 to 20th 21 to 50th	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution 0.1V	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy ± (2%+5d) ± (4%+5d)	
Range 0.000 (WH, Harm	e ok to 9.9999M (VAH/VARH)  conics Magnitude Range 1 to 20th 21 to 50th 1 to 20th	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy ± (2%+5d) ± (4%+5d) ± (2%+5d)	
Range 0.000 (WH, <i>Harm</i>	e ok to 9.9999M (VAH/VARH)  conics Magnitude Range 1 to 20th 21 to 50th	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution 0.1V	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy ± (2%+5d) ± (4%+5d)	
Rango 0.000 (WH, Harm ACV	e kik to 9.9999M (VAH/VARH) (VAH/	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution 0.1V  0.1A to 1A	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy ± (2%+5d) ± (4%+5d) ± (2%+5d) ± (4%+5d) 5%, Freq:50/60 Hz,	
Range 0.000 (WH, Harm ACV ACA	k to 9.9999M (VAH/VARH) conics Magnitude Range 1 to 20th 21 to 50th 1 to 20th 21 to 50th 21 to 50th Range	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution 0.1V  0.1A to 1A  re (Harmonic Level > 5 Resolution	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy ± (2%+5d) ± (4%+5d) ± (4%+5d) 5 (4%+5d) 5 (4%+5d) 4 (4%+5d)	
Rango 0.000 (WH, Harm ACV	k K to 9.9999M (VAH/VARH) (V	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution 0.1V  0.1A to 1A	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz, Accuracy ± (2%+5d) ± (4%+5d) ± (2%+5d) ± (4%+5d) 5%, Freq:50/60 Hz, Accuracy Accuracy	
Range 0.000 (WH, Harm ACV ACA	k to 9.9999M (VAH/VARH) conics Magnitude Range 1 to 20th 21 to 50th 1 to 20th 21 to 50th 21 to 50th Range	Resolution 0.001K to 0.001M (W/VA/VARH)  e (Harmonic Level > 5 Resolution 0.1V  0.1A to 1A  re (Harmonic Level > 5 Resolution	Accuracy ± (1.5%+20d) % , Freq:50/60 Hz Accuracy ± (2%+5d) ± (2%+5d) ± (4%+5d) 5%, Freq:50/60 Hz Accuracy	

ACA	1 to 20th	0.1 %	± (2%+10a)
	21 to 50th		± (4%+20d)
Salar of A		1000	
Total	Harmonic Dist	ortion	
Rang	e	Resolution	Accuracy
0 to 2	20 %	0.1 %	$\pm (2\% + 5d)$
20 1	to 100%		$\pm (6\% + 10d)$

Data Recording	≤ 0.1% no. of total saved data typically.  Micro SD memory card	Type K Temperature Range	Resolution	Accuracy
Sampling Time	Approx. 1 second	-100.0°C to 199.9°C	0.1℃	± (1%+1°C)
	A CONTRACTOR CONTRACTO	200°C to 1300°C	1°C	± (1%+2°C)