



SA2200 - - Features and Benefits

- 5.6 inch TFT LCD with resolution 640*480
- Standard compliance: IEC61000-4-30 Class A
- Waveform real-time display (4 voltages/4 currents)
- Half cycle RMS measurement (voltage and current)
- Measurement of harmonics can be up to 100 times
- Vector, Trend, Bar Graph and events table display
- Three-phase unbalance (voltage and current)
- Built-in 32G memory card
- WIFI communication is supported




Selection Guide

Selection Guide	SA2100	SA2200
Model	SA2100	SA2200
IEC61000-4-30 standard compliance	Class S	Class A, Ed.3
AC/DC	√	√
Voltage/Current	√	√
Frequency	50Hz,60Hz,400Hz	50Hz,60Hz,400Hz
Dips /swell	√	√
Harmonics	1-50th (50/60Hz)	1-100th (50/60Hz)
Power / Energy	√	√
Unbalance	√	√
Monitor	√	√
Inrush	√	√
Flicker	√	√
Transients	20kS/s	200kS/s
Logger	√	√
Mains signaling	NO	√
Wave Recording	NO	√
Channel (Voltage/Current)	4/4	
Voltage Range	1-1000Vrms, 6000V transient voltage	
Current Range	depends on supplied current clamp	
Micro SD card (build-in)	8GB	32GB
Capacity/Life	NI-MH, 3800mAh>7h	Lithium ion, 5200mAh/>8h
GPS/Beidou	NO	(option)
Interface	USB Host, LAN	USB Host, LAN, WIFI
WIFI App	NO	(option)
Screen	5.6 inch TFT LCD /320*240	5.6 inch TFT LCD /640*480
Language	9- Chinese, English, French, German, Korean, Polish, Portuguese, Spanish, Turkish	14- Chinese, English, French, German, Italian, Japanese, Korean, Polish, Portuguese (Brazil/Portugal), Russian, Spanish (Latin/Spain), Turkish
Dimension	262 mm × 173 mm × 66 mm	270 mm × 190 mm × 66 mm
Weight	1.6kg	2.0kg
Wire Combinations	1Ø+NEUTRAL, 1Ø SPLIT PHASE, 1Ø IT NO NEUTRAL, 3Ø WYE, 3Ø DELTA, 3Ø IT, 3Ø HIGH LEG, 3Ø OPEN LEG, 2-ELEMENT, 2 1/2-ELEMENT	
Electrical Safety	IEC61010-1 ,Safety Degree: 600V CAT IV 1000V CAT III	

Specifications






Measurement		Measurement Range	Resolution	Accuracy
Voltage / Current / Frequency				
Vrms(AC+DC)		1~120Vrms	0.001Vrms	±0.1% of nominal voltage
		120Vrms~400Vrms	0.01Vrms	
		400Vrms~1000Vrms	0.1Vrms	
Vpk		1~1400Vpk	0.01Vpk	±0.5% of nominal voltage
V(Crest Factor)		1.0~>2.8	0.01	±5%
Ams(AC)	10mV/A	0~150A	0.01A	±0.1% ±0.1A
	1mV/A	1~2000A	0.01A	±0.1% ±0.1A
	65mV/1000A	10~6000A	0.01A	±0.1% ±0.2A
A(Crest Factor)		1~10	0.01	±5%
Frequency		42.5~57.5(50Hz nominal)	0.01Hz	±0.01Hz
		51~69(60Hz nominal)	0.01Hz	±0.01Hz
		320~480(400Hz nominal)	0.01Hz	±0.01Hz
Dips&Swells				
Vrms1/2		0~200% of nominal voltage	0.01Vrms	±0.2%
Ams1/2		depends on current clamps	0.01A	±1%
Harmonic(IEC61000-4-7)				
Harmonic Number		1~100(50/60Hz) 1~12(400Hz)		
Harmonic Voltage % of		0.0~100.0%	0.01%	±0.1% ± nx0.1%
Harmonic Current % of		0.0~100.0%	0.01%	±0.1% ± nx0.1%
THD		0.0~100.0%	0.01%	±2.5%
Phase		-180°~180°	0.1°	± nx0.1°
Power and Energy				
P,S,Q1		Max.6000MW	0.1kW	±1% ± 10 digits
PF & CosΦ		0~1	0.01	±0.01
kWh,kVAh,kvarh		depends on nominal voltage and current clamps		±1% ± 10 digits
Flicker(IEC61000-4-15)				
Pst(10 min) / Plt(2 hrs)		0.00~20.00	0.01	±5%
Unbalance				
Voltage		0.0~20.0%	0.1%	±0.1%
Current		0.0~20.0%	0.1%	±1%
Voltage Phase		-360°~0°	0.1°	±0.1°
Current Phase		-360°~0°	0.1°	±0.5°
Voltage Transient				
Vpk		±6000Vpk	0.01V	±15%
Vrms		10~1000Vrms	0.01V	±2.5%
Min.Test Time		5us		
Inrush Current				
Ams		depends on current clamps	0.01A	±1% ± 5 digits
Inrush Duration		1~32min selectable	10ms	±20ms
Mains Signaling				
Signaling Frequency		60~3000Hz	0.1Hz	--
Relative V%		0%~100%	0.10%	±0.4%
Absolute V3s(3s average)		0.0~1000V	0.1V	±5% of Nominal voltage
Logger				
Recording		user defined parameters for 4 phases at the same time		
Memory		Data stored in TF card, 32GB		
Duration Time		2 hrs to 1 year,depends on the recording items and time interval		
Interval		1s to 60 minutes		




Accessories

Voltage Test Leads + Alligator Clips	 (SA2200)	(2m) × 5 pcs
	 (SA2100)	
Power Cord Power Adapter		1 pcs

Soft Carry Bag		1 pcs
CD (Software, Manuals)		1 pcs
Sticker of input port (SA2200)		1 pcs

CT Clamps

Clamp Mode	ST08-SA	CTC0080	CTC0130	CTC1535	ETCR035AD
Appearance					
Measurement Range	0-5A	0-50A	1~100A	1~1000A	0.0-1000A (AC/DC)
Output Voltage Ratio	10mV/A	10mV/A	1mV/A	1mV/A	1mV/A
Accuracy	0.2%	0.2%	0.2%	1%	±3%
Frequency Characteristic	45Hz~55Hz	50Hz~400Hz	50Hz~400Hz	40Hz~100kHz	AC: 45Hz~400Hz
Clamp Radius (mm)	8	8	13	52	30×35
Dimension (mm)	158×43×24	171×46×27	174×52×27	111×216×45	122×70×33
Cable Length (cm)	200	200	200	200	150
Power	○	○	○	○	9V Dry cell 6LR61

Flexible Probes Mode	SY-1500A	PY-3000A	PY-5000A (SA2100)	SY-6000A (SA2200)
Appearance				
Measurement Range	1~1500A	15~3000A	20~5000A	20~6000A
Output Voltage Ratio	100mV/1000A @ 50Hz	65mV/1000A @50Hz	50mV/1000A @ 50Hz	65mV/1000A @ 50Hz
Accuracy	±0.5% + Position Error	±1% + Position Error		±1% + Position Error
Maximum Allowable Input	100KA	100KA		100KA
Phase Error	<±1°	<±1°		<±1°
Noise	<2mVrms (10Hz~10KHz)	<2mVrms (10Hz~10KHz)		<2mVrms (10Hz~10KHz)
Frequency Characteristic	10Hz~10KHz (-3dB)	10Hz~10KHz (-3dB)		10Hz~10KHz (-3dB)
Weight	110g	130g		150g
Length	200cm	200cm		200cm
CT Perimeter	35cm	50cm		80cm
Measurement Position Error	±1%	±2%		±2%