



SA2110 Power Quality Analyzer

Features

- Fully compliant with stringent international IEC61000-4-30 Class S standard
- 5.6 inch color LCD touch screen with refreshing User Interface
- Add new function: Data logging, Inverter Efficiency, Mains Signaling, Harmonic Power, Waveform Recording
- IP53 protection grade
- High safety rating in the industry: CAT III 1000V/CAT IV 600V



Specification

| | Measurement Range | Resolution | Accuracy |
|--|---|---|---|
| Voltage/Current/Frequency | | | |
| Vrms(AC+DC) | 1V~120V 120V~400V 400V~1000V | 0.001V 0.01V 0.1V | Udin<100V: ±0.2V Udin>100V: ±Udin*0.2% |
| Vpk V(Crest Factor) | 1~1400V 1.0~*2.8 | 0.01V | ±5% of nominal voltage ±5% |
| Arms (No. CTs error is not inclusive) | 0~150A 1A~2000A | clamp's range*current proportion, 5 effective digits display | ±(0.1% reading+0.05% range) ±(0.1% reading+0.05% range) |
| Flexible coils A(Crest Factor) | 10A~4000A 1~10 | 0.01 | ±0.1% reading+0.1% range ±5% |
| Frequency | 42.5Hz~57.5Hz (50Hz nominal) 51Hz~69Hz (60Hz nominal) 320Hz~480Hz (400Hz nominal) | 0.01Hz 0.01Hz 0.01Hz | ±0.01Hz ±0.01Hz ±0.01Hz |
| Dips & Swells | | | |
| Vrms1/2 Arms1/2 | 0~200% of nominal voltage depends on current clamps | refer to Vrms refer to Arms | ±0.5% nominal voltage ±(0.2% reading+0.2% range+CT) |
| Harmonic (IEC61000-4-7) | | | |
| Harmonic Number | 1~100 (50/60Hz) 1~12 (400Hz) | | ±5% reading (Nominal±1% nominal value) ±0.05% nominal voltage (Nominal±1% nominal value) |
| Absolute Voltage | 0~1000V | refer to Vrms | |

1. The accuracy depends on the type of charge the specification of the voltage or current value.

| | Measurement Range | Resolution | Accuracy |
|--|---|-----------------------|--|
| Absolute Current | depends on current clamps | refer to Vrms | ±5% reading (Nominal±1% nominal value) ±0.05% nominal current (Nominal±3% nominal value) |
| THD | 0.0~100.0% | 0.01% | ±2.5% |
| Phase | -180°~180° | 0.1° | ±0.5° (±0.5% harmonic number) |
| Harmonic Power (50/60Hz) | 1~50 | Min 0.01kW | ±(5%+n*2%+CT) |
| Harmonic Power (400Hz) | 1~12 | | |
| K factor | 1~50 | 0.01 | ±10% (Nominal±1% current range) |
| Power and Energy (IEC61851) | | | |
| P, S, Q1 | depends on nominal voltage and current clamps | min 0.01kW | ±(1%+10 digits+CT) |
| PF & cosφ | 0~1 | 0.01 | ±0.01 |
| kWh, kVAh, kvarh | depends on nominal voltage and current clamps | | ±(1%+10 digits+CT) |
| Flicker (IEC61000-4-15) | | | |
| Plt(10min) Plt(2hrs) | 0.00~20.00 | 0.01 | ±5% |
| Unbalance | | | |
| Voltage | 0.0~30.0% | 0.01% | ±0.1% |
| Current | 0.0~30.0% | 0.01% | ±1% |
| Voltage Phase | -360°~0° | 0.1° | ±0.1° |
| Current Phase | -360°~0° | 0.1° | ±0.5° |
| Voltage Transient | | | |
| Vpk Vrms Min. Test Time Sample rate | ±6000Vpk 10~1000Vrms 5µs 200kS/s | 0.01V 0.01V | ±15% ±2.5% |
| Inrush Current | | | |
| Arms Inrush Duration | depends on current clamps 1~32min selectable | refer to Arms 10ms | ±(1%+CT) ±20ms |
| Mains Signaling | | | |
| Signaling Frequency Relative V% Absolute V% (average 3s) | 60~3000Hz 0%~100% 0.0~1000V | 0.1Hz 0.1% 0.1V | ±0.4% ±5% of nominal voltage |
| Logger | | | |
| Memory Duration Time Interval | built-in Micro SD card, 32GB 2 hrs to 1 year, depends on the recording items and time interval 1s to 60 minutes | | |
| Monitor | | | |
| Support EN50160 in default or user-defined standard | | | |
| General Characteristics | | | |
| Communication Language Power Screen Dimension/Weight | USB Host, LAN, WIFI Multi language including Chinese, English, etc. Li-ion, 36.48Wh (7.4 V, 5200 mAh) / 12 V/2 A DC adaptor 640*480 pixels, 5.6 inch color LCD touch screen 270(H)*200(W)*68(D) mm / approx. 2KGs | | |
| Accessories | | | |
| Standard | Voltage Test Leads: 5pcs Alligator Clips: 5pcs Power Cord: 1pcs Power Adaptor: 1pcs | AC/DC CT CIS-100AD | Soft carry bag: 1pcs Sticker of input port: 1pcs USB Flash Disk (Manual+PC software): 1pcs |
| Optional | AC CT C01-5A C02-100A C03-200A C04-1000A | AC/DC CT CIS-100AD | Rogowski Coil C06-300A C07-3000A C08-6000A (including the colored identification clip) |
| | Voltage Magnetic Connector Hard Protection Case Bluetooth/GPS receiver | | |

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