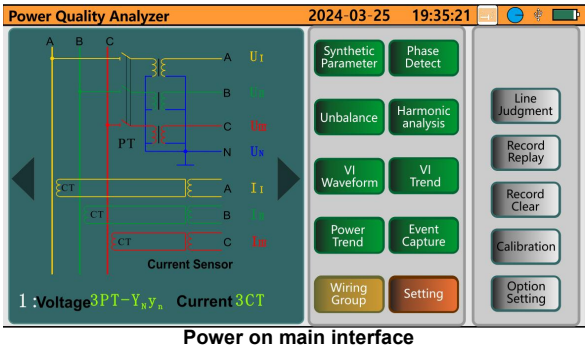
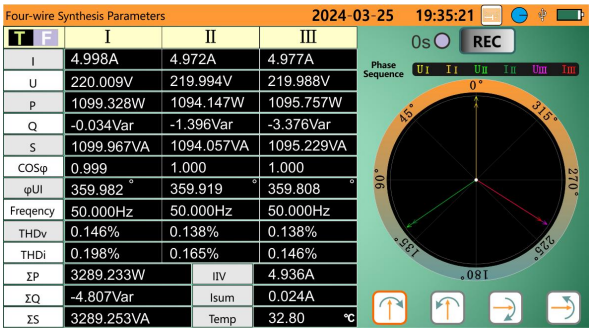
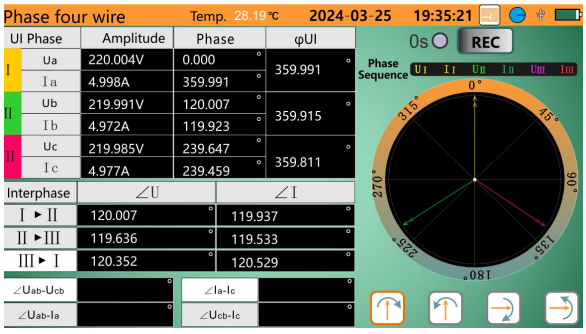


Power on main interface



	I	II	III
I	4.998A	4.972A	4.977A
U	220.009V	219.994V	219.988V
P	1099.328W	1094.147W	1095.757W
Q	-0.034Var	-1.396Var	-3.376Var
S	1099.967VA	1094.057VA	1095.229VA
COSφ	0.999	1.000	1.000
φUI	359.982°	359.919°	359.808°
Freqency	50.000Hz	50.000Hz	50.000Hz
THDv	0.146%	0.138%	0.138%
THDi	0.198%	0.165%	0.146%
ΣP	3289.233W	IIV	4.936A
ΣQ	-4.807Var	Isum	0.024A
ΣS	3289.253VA	Temp	32.80 ℃

Comprehensive parameters - 3-phase 4-wire test interface

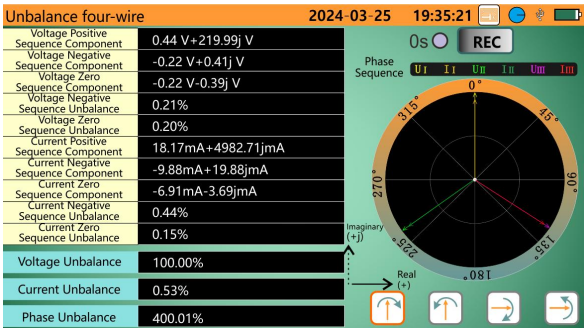


UI Phase	Amplitude	Phase	φUI
Ua	220.004V	0.000°	359.991°
Ia	4.998A	359.991°	
Ub	219.991V	120.007°	359.915°
Ib	4.972A	119.923°	
Uc	219.985V	239.647°	359.811°
Ic	4.977A	239.459°	

Interphase	∠U	∠I
I ▸ II	120.007°	119.937°
II ▸III	119.636°	119.533°
III ▸ I	120.352°	120.529°

∠Uab-Ucb	°	∠Ia-Ic	°
∠Uab-Ia	°	∠Ucb-Ic	°

Phase measurement - 3-phase 4-wire test interface



Voltage Positive Sequence Component	0.44 V+219.99j V
Voltage Negative Sequence Component	-0.22 V+0.41j V
Voltage Zero Sequence Component	-0.22 V-0.39j V
Voltage Negative Sequence Unbalance	0.21%
Voltage Zero Sequence Unbalance	0.20%
Current Positive Sequence Component	18.17mA+4982.71jmA
Current Negative Sequence Component	-9.88mA+19.88jmA
Current Zero Sequence Component	-6.91mA-3.69jmA
Current Negative Sequence Unbalance	0.44%
Current Zero Sequence Unbalance	0.15%
Voltage Unbalance	100.00%
Current Unbalance	0.53%
Phase Unbalance	400.01%

Unbalance - 3-phase 4-wire test interface

Product Features

1. Make comprehensive analysis and diagnosis of three-phase power quality.
2. 4 types of current sensors provide options to application on various sites.
3. 4-channels current and 3-channels voltage are measured simultaneously.
4. The test accuracy is 0.5 class, the test is stable and the anti-interference ability is strong.
5. Touch colorful screen, simple human-machine operation, and switch with different operation language(Chinese & English).
6. USB communication uploads the recorded test results to the computer for analysis.
7. Equip with large capacity lithium battery.

Product Functions

1. Waveforms real-time display (3 channels voltages/4 channels currents).
2. True effective values(TRMS) of voltage and current.
3. Phase diagram display.
4. Each phase harmonics measurement, harmonic up to 50 orders.
5. The bar graph shows the harmonic content rate of each phase current and voltage.
6. Total harmonic distortion (THD).
7. Active/reactive/apparent power value and total value of each phase.
8. Voltage & current power trend chart.
9. Three-phase unbalance measurement (voltage and current).
10. Record wave forms and parameters.
11. Screenshot and save.
12. Touch screen operation.
13. Voltage flicker, voltage surge and voltage drop capture.
14. Starting current and surge current monitoring.
15. USB interface communicate with the computer host computer.
16. Setting the wiring connection method and power network type of the instrument.
17. Selecting different clamp current sensor and different voltage test ratio.

Technology Specifications

Power Supply	Rechargeable lithium battery 7.4V, 5200mAH, external charger
Display Mode	5 inch touch colorful screen
Working Current	About 490mA
Clamp Current Sensor (Optional)	Clamp current sensor 015B: 17mmX18mm; Clamp current sensor 042B: 35X40mm Clamp current sensor 050B; Φ50mm Flexible coil current sensor 300FA: Φ300mm
Meter Dimension	240mmX170mmX68mm
Channel	3 channels voltage, 4 channels current
Voltage Range	2V~600V
Current Range	Clamp current sensor 015B: 10mA~10.0A Clamp current sensor 042B: 0.1A~100A Clamp current sensor 050B; 1A~1000A Flexible coil current sensor 300FA: 10A~6000A
Frequency	40Hz~70Hz
Harmonic	Yes, 2~51 orders
Total Harmonic Distortion	Yes, 2~51 orders, each phase
Three-Phase Unbalance	Yes
Communication Interface	USB
Language	Switch between Chinese and English
Battery Power Indication	Battery symbol will display battery power, when the battery power too low, the instrument will automatic shutdown
Automatic Shut Down	During record function acting, the meter will not automatic shutdown
	During record function off, can setting the automatic shutdown time of 15minutes, 30minutes, 60minutes.
Instrument Weight	Total weight: about 8kg (include all accessories)
Input Impedance	Test voltage input impedance: 1MΩ
Withstand Voltage	The instrument circuit and the housing can withstand 3700V/50Hz sine wave AC voltage for 1 minute.
Insulation	Between the instrument circuit and housing≥10MΩ
Structure	Double insulation, with insulation anti-vibration sheath
Suitable Safety Standard	IEC-61010 CAT III 1000V / CAT IV 600V, IEC-61010-031, IEC-61326, Pollution Degree 2
Working Temperature	-10℃~40℃; Below 80%RH
Storage Temperature	-10℃~60℃; Below 80%RH
Accessories	Host: 1PCS; Instrument bag: 1pcs; Pen probe test lines: 4PCS (each 1PCS of yellow, green, red, black); Alligator clip: 4PCS; Charger 1PCS; 4G Memory card: 1PCS. Clamp current sensor: (optional)

Instrument Accuracy

Measurement specification	Range	Display resolution	Max Error
Frequency	40Hz~70Hz	0.001Hz	±(0.01)Hz
Voltage True RMS	2V~600V	Min resolution 0.001V	±(0.5%Fs)
Current True RMS	10mA~6000A	Min resolution 0.001A	±(0.5%Fs)
Active Power	0.0000W~3600kW	Min resolution 0.001W	±(1%+3dgt); Cosφ≥0.8
			±(1.5%+10dgt); 0.2≤Cosφ<0.8
Reactive Power	0.000VAR~3600kVAR	Min resolution 0.001VAR	±(1%+3dgt); Sinφ≥0.5
			±(1.5%+10dgt); 0.2≤Sinφ<0.5
Apparent Power	0.0000VA~3600kVA	Min resolution 0.001VA	± (1%+3dgt %)
Power Factor	-1.000~1.000	0.001	±(1.5%+3dgt); Cosφ≥0.5
			±(1.5%+10dgt); 0.2≤Cosφ<0.5
Phase Angle	-179°~180°	0.001°	±(3°)
Voltage Harmonic Ratio 1~50 Orders (Vrms>50V)	0.0%~99.9%	0.001%	(2~20 orders)±(1%rdg+5dgt) (21~30 orders)±(1%rdg+10dgt) (31~51 orders)±(1%rdg+15dgt)
Voltage Harmonic Angle (Vrms >50V)	-179°~180°	0.001°	±(3°) harmonic 2~25 orders
			±(10°) harmonic 26~51 orders

Current Harmonic Ratio 1~50 Orders (Arms>I range/100)	0.0%~99.9%	0.001%	(2~20 orders)±(1%rdg+5dgt) (21~30 orders)±(1%rdg+10dgt) (31~51 orders)±(1%rdg+15dgt)
Current Harmonic Angle (Arms >Arms>I range/100)	-179°~180°	0.001°	±(3°) harmonic 1~25 orders ±(10°) harmonic 26~50 orders
Total Harmonic Rate (DF or THD-F)≤50	0.0%~99.9%	0.001%	±(1%rdg+10dgt)
Distortion Factor (DF or THD-R)≤50	0.0%~99.9%	0.001%	±(1%rdg+10dgt)
Three-phase Unbalance	0.0%~100 %	0.01%	±(1 %)

Current Sensor Characteristics (Optional)

Current Sensor Model	Clamp Current Sensor	Current True RMS	Max. Resolution	Current True RMS Max Error	Phase Angle φ Max Error
EM015B CT Size: 17mmX18mm		10mA~10.0A	1mA	±(1%rdg+0.05%fs)	±(2°)
EM042B CT Size: 35X40mm		0.10A~100A	1mA	±(1%rdg+0.05%fs)	±(2°)
EM050B CT Size: Φ50**mm**		1.0A~1000A	1mA	±(2%rdg+0.05%fs)	±(2°)
EM300FA CT: Φ300**mm**		10.0A~6000A	1mA	±(1%rdg+0.05%fs)	±(2°)