

ETCR METER®


Guangdong ETCR Electronic Technology Co., Ltd.
Export Electrical Safety For Life, Professional & Qualitative



PRODUCT MANUAL

2026



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ABOUT <<<

ETCR METER[®]

Guangdong Etc Electronic Technology Co.,Ltd Is A High-Tech Enterprise That Integrates Research And Development, Manufacturing And Sales, And Application Services.

18 Years Of Experience Committed To Providing Intelligent Power Testing Instruments And Solutions For Power Quality Management To Our Customers.

The Main Products Include: Earth Resistance Tester, High-Voltage Insulation Resistance Tester, DC Resistance Tester, Approach Electricity Alarm, Wireless High-Voltage Phase Detector, Ground Fault Detector, Zinc Oxide Lightning Arrester Tester, High And Low Voltage Clamp Current Tester, Phase Voltmeter, Power Quality Analyzer, Leakage Current Transformer, Three-Phase Imbalance Correction Device, Etc.

The Products Are Widely Used In Power, Communication, Military, Petroleum, Chemical, Meteorological, Railways, Industrial And Mining Enterprises, Etc.



ABOUT ETCR METER



Our Quality Policy
Based On Customer Needs, Driven By Technological Innovation, Ensured By Strict Management, And Aimed At International Standards, We Provide Customers With Satisfactory Products And Services.



Our Values
Unity And Harmony, Shared Interests, Honesty And Trustworthiness, Respect For Innovation, Rigorous Discipline, And Pursuit Of Excellence.



Our Goal
Build ETCR Into An Intelligent Power Testing Instrument And Control Equipment Supplier With Independent Intellectual Property Rights, Core Technologies, Scale, And Technological Leadership.

Enterprise Honor Certification

CHINA HIGH TECHNOLOGY ENTERPRISES ETCR METER



COMPANY SCALE ADVANTAGE

Production Advantages

8000+m² Standard Production Plant, Efficient Management Team, Over 100 Dedicated And Excellent Employees.

With 18 Years Of Experience In Instrument Research And Development, The Company Ensures Timely And High-Quality Completion Of Production Tasks.



Quality Advantage

The Company Strictly Adheres To The GB/T 19001-2016/ISO 9001:2015 Quality Management System.

We Have Over 200 Various Standard Sources And Calibration Devices For Timely Measurement And Calibration, And Each Product Undergoes Strict Factory Inspection And Testing Before Leaving The Factory.

R&D Advantages

The Company Has A High-Level Technical Research And Development Team, Product Development And Manufacturing Follow The Standards Of The International Electrotechnical Commission.

Focuses On Developing Intelligent, Safe, Durable, And Accurate Power Testing Products, And Continuously Iterates And Upgrades Existing Products To Ensure Advanced Technology And Excellent Quality.

Service Advantages

The Company Has A High-Level Technical Research And Development Team, Product Development And Manufacturing Follow The Standards Of The International Electrotechnical Commission.

Focuses On Developing Intelligent, Safe, Durable, And Accurate Power Testing Products, And Continuously Iterates And Upgrades Existing Products To Ensure Advanced Technology And Excellent Quality.



One-Stop Service

Project Construction, Pre-Sales Consultation, In-Sales Service, After-Sales Support, Etc.



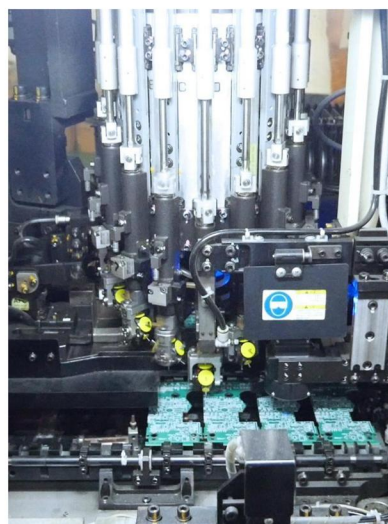
Free Product Information

Free Product Parameters, Product Manuals, Product Usage Cds, Video Tutorials



Professional Agency Services

Sincerely Recruiting Agents And Distributors From All Over The World



1 Production Line

With Over Ten Years Of Experience In Instrument Research And Development, The Company Ensures Timely And High-Quality Completion Of Production Tasks

2 Factory Size

The Company Has A Standard Production Plant Of 8000 Square Meters

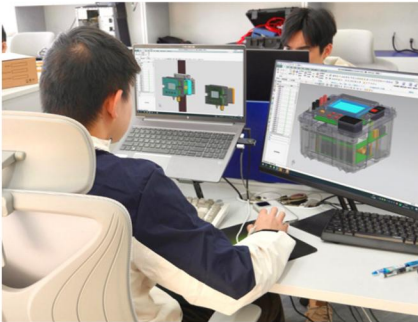
3 Total Employees

An Effective Management Team, And Over 100 Dedicated And Excellent Employees

COMPANY SERVICES

Customer Recognition Is The Greatest Encouragement For Us, And User Satisfaction Is The Best Reward We Can Receive.

Through Our Relentless Efforts, We Are Confident That More Users Will Adopt Our Products, And More Partners Will Join Hands With Us To Create A Brighter Future Together!



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Please Scan QR Code For More Products

Earth Resistance Tester Series



Clamp Earth Resistance Tester



EM2000/A/C/X
EM2000+/A+/B+/C+
EM2100/A/C
EM2100+/A+/C+
EM2150
EM2200
EM2300/B

- ¶ Earth Resistance: 200/500/1000/1200/1500Ω
- ¶ Current Range: 30/40A
- ¶ Voltage to Earth Range: 0.1V~100.0V
- ¶ Alarm Function: Sound-light alarm
- ¶ CT Size: 65mmx32mm / Φ32mm



Digital Earth Resistance Tester



EM3000B
EM3040
EM3100C
EM3200/C
EM3250

- ¶ Earth Resistance: 2000Ω/3000Ω/30.00kΩ
- ¶ Earth Current: Up to 600A
- ¶ Earth Voltage: 100/200/600V
- ¶ Soil Resistivity: Up to 9000kΩm
- ¶ Measurement Methods: 2/3/4-Wire method
Selection method, Double clamp method



Large Scale Grounding Network Ground Resistance Tester



EM3300B
EM3350

- ¶ Impedance Range: 0.000Ω~ 2000Ω
- ¶ Max.Output Current: 5A / Max.Output Voltage: 400V
- ¶ Earth resistance, earth continuity, soil resistivity, step voltage,
- ¶ Contact voltage and earth surface electric potential gradient
- ¶ Touch large color screen, Support RS485 communication to on-line detection



Earth Resistance On-Line Detector



EM2800B/C/S
EM2800KB/KC/KS
EM2800E/N/T/X
EM2900/B

- ¶ Earth Resistance: 100/200/2000Ω
- ¶ Current: Up to 20A
- ¶ RS485 interface
- ¶ Self-calibration, Line resistance calibration
- ¶ Set testing time, Sound-light alarm



Earth Resistance Special Test Line & Accessories



EM300-Test Line
EM300-Spool
EM300-Ground Pin

- ¶ Test line specifications: banana plug+test line+ ground clip
Line core 0.75mm² (Φ3.5mm) /Line core 2.0mm² (Φ3.8mm)
- ¶ Spool specifications: Winding 30/50/100/200/300m (Φ3.5mm)
Winding 400/800m (Φ3.8mm)
- ¶ Ground Stake specifications: Nickel Steel 240/400/800mm



Insulation Resistance Tester Series



Insulation Resistance Tester

EM3430A/B
EM3440A/B
EM3460A/B
EM3480A/B

- Output Voltage: 1000V/2500V/5000V
- Test Resistance: 50/400GΩ
- Short Circuit Current: 1mA/2mA MAX

- Insulation resistance value, test time, output voltage display at same screen
- The functions of auto discharge, DAR, PI



High Voltage Insulation Resistance Tester

EM3500
EM3500B
EM3520
EM3520B
EM3520C

- Output Voltage: 50V~15kV
- Test Resistance: 0.005MΩ~30TΩ
- Short Circuit Current: 5mA/7mA MAX
- The functions of PI, DAR, Step, Ramp, Capacity
- And DD function, custom setting voltage & time



Multiloop Insulation Resistance Tester

EM3560

- Output Voltage: 500V~5kV
- Test Resistance: 1.00MΩ~400GΩ
- Test Current: 2.5mA MAX

- 19 test loop circuits of insulation resistance, 3 gears of optional test voltage
- 7-inch touch colorful screen, can set loop test time and discharge time

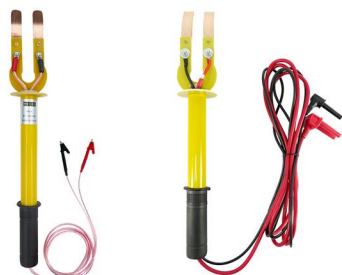


Insulation Resistance On-line Monitor

EM3580
EM3580B
EM3580C

- Output Voltage: 50V~1000V
- Test Resistance: 0.1MΩ~20GΩ
- Test Current: 5mA MAX

- Manual measurement, RS485 remote measurement, Bluetooth measurement
- Test the insulation resistance & dry contact signal of 8 channels loop circuits



Insulation Resistance Tester Plate Electrode

EM340
EM350

- Rod length: 30cm
- Line length: 1.5/2.5 M
- Optional 4mm banana plug/double banana plug



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DC Resistance Tester Series



Portable Milliohmmeter/Micro Ohmmeter

EM3630A	Resistance Range: 0.1mΩ~40.0kΩ
EM3640A	Max. Test Current: 100mA/1A

- Large capacity lithium battery
- Kelvin bridge method accurate measurement
- Precision 4-wire method, AC/DC 2 channel simultaneous detection



Grounding Down Lead Continuity Tester

EM3650	Measure Range: 1.000mΩ~10.00Ω
	Max. output voltage 24V, Max. test current 10A

- Two power supply mode: AC 220V and built-in rechargeable battery
- Two measurement mode: Automatic/manual measurement mode
- 5inch touch screen, built-in printer, Bluetooth communication, USB interface



Transformer DC Resistance Tester

EM3660A	Measure Range: 0.100mΩ~50.00kΩ
EM3670A	Max. output voltage 24V, Max. test current 10A

- 5inch touch screen, measurement operation touch screen/button
- Power supply: AC 110V~220V
- 75° conversion resistance, built-in printer, Bluetooth communication, USB interface



Contract Loop Resistance Tester

EM3690	Measure Range: 0.0uΩ~80.000mΩ
EM3690C	Max. test current 100A, measurement time 1s~60s

- Overheat protection, when internal temperature over high will stop testing
- 5inch touch colorful screen, Bluetooth communication, USB, auto shutdown
- Anti-power frequency interference, suitable for 100KV substation



Equipotential Connection Resistance Tester

EM3700	Measure Range: 1mΩ~30.0kΩ
EM3700C	Max. Test Current: 2A/4A
EM3740	Alarm function, clock function, data upload function

- Precision 4-wire method measurement, testing more accurate
- Water-proof case, waterproof, shockproof, drop-resistant, durable and reliable





Battery Tester Series



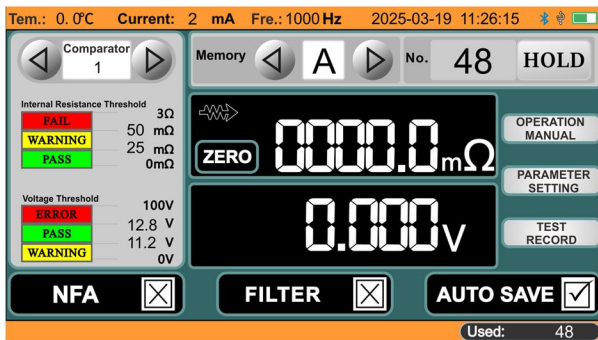
Battery Tester

- EM7500 ❖ Cold start current test range: 100CCA~2000CCA
- EM7510 ❖ Battery voltage test: 12V/24V
- ❖ Measurement method: Kelvin Four-terminal sensing
- ❖ Language options: Chinese and English Supports
- ❖ AGM/EFB start-stop battery testing

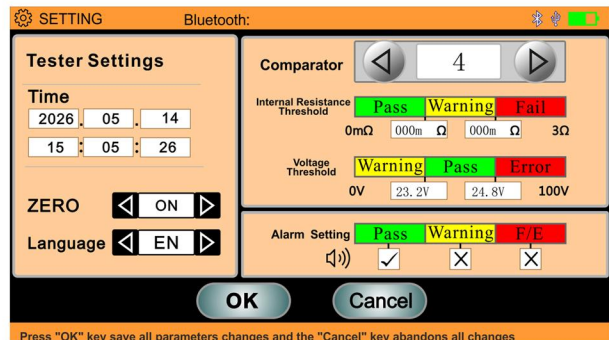


Battery Internal Resistance Tester

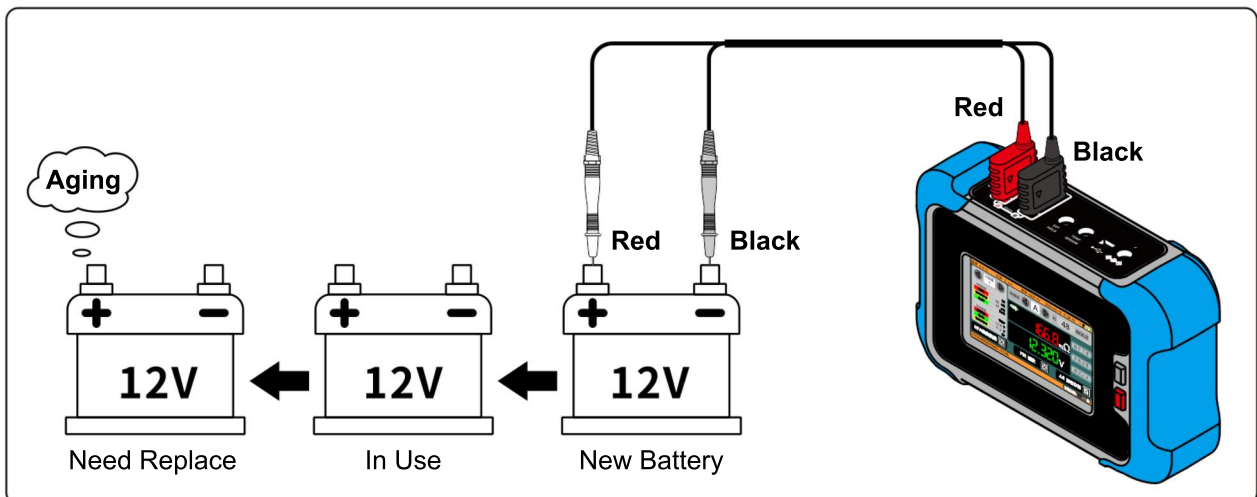
- EM7550 ❖ Internal resistance measurement: 0.000mΩ~3.100Ω
- ❖ Voltage measurement: 0.000V~±100.00V
- ❖ Measurement method: Four-wire Kelvin test method
- ❖ Chinese and English language options, Comparator function, filtering function
- ❖ 5-inch touchscreen, Bluetooth communication, USB, automatic power-off



< Battery Internal Resistance Test Interface >



< Set interface >



< Test Schematic Diagram >



Please Scan QR Code For More Products

Multimeter/Clamp Multimeter



Digital Voltage Meter

- EM5920 Voltage measurement: AC/DC 0.0mV~600V (True RMS)
- High internal resistance, overload protection
- Small handheld 3 1/2-digit digital voltmeter
- Have backlight and reading hold function
- LCD display with character height of 15 mm, and the readings are clear



Digital Multimeters

- EM5930 Voltage measurement: AC/DC 0.0mV~2000V (True RMS)
- EM5940
- EM5960 Continuity test, diode forward voltage drop measurement, overload protection
- EM5980
- Portable, 3 1/2 digit auto-ranging, compact structure, easy operation
- Backlight, data hold, auto-off function, data hold, flashlight



Clamp Multimeters

- EM6420/B Voltage measurement: AC/DC 400mV~2000V (True RMS)
- EM6440C
- EM6450 Current measurement: AC/DC 4A~2000A (True RMS)
- EM6470
- Perfect integration of clamp meter and multimeter functionalities
- Clamp sizes: 27/42/52/55/150mm
- Features: Auto-off, data hold, flashlight functions



Field Testing





Clamp Leakage Current Meter Series



High Precision Clamp Leakage Current Meters

EM6530/6540	AC Current: AC 60/300/1000/1200/2000/3200/4000A
EM6640/6670/6680	Jaw Size: 25x30/Φ40/Φ70/80x80/108x148mm
EM7100/A	

Features: True RMS measurement, filtering, max/min/avg values, harmonics, distortion rate

Backlight, flashlight, data hold, Bluetooth communication



AC/DC Clamp Current Meter

EM6000/B	AC/DC Current: 60/1000/2000A
EM6100	Jaw Size: Φ8/Φ16/30x35/Φ70/80x80/108x148mm
EM6670D/6680D	Features: True RMS, filtering, max/min/avg
EM7100D	Backlight, flashlight, data hold, Bluetooth



Flexible Coil Large Current Meter

EM6900/A	AC Current: AC 5000A/9999A
EM6910	Jaw Size: Φ150/200/300mm
EM6920/B	Suitable for narrow spaces
	Multi-parameter display, easy to use
	Backlight, data hold, Bluetooth

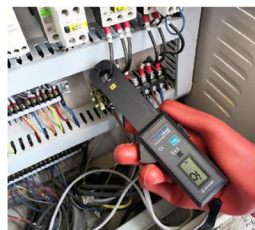


Large Caliber Clamp Power Meter

EM7300	AC Current: 1200/2000/6000A
EM7300A	Voltage measurement: AC 600V
EM7350	Jaw Size: 80x80/Φ200/300mm
EM7350B	Multi-parameter display, convenient operation
	backlight, data hold, Bluetooth



Field Testing





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H/L Voltage Clamp Current Meter



H/L Voltage Clamp Current Meter

- | | |
|--------------|--|
| EM9000/A/B/S | AC Current Range: AC0.00mA~600/1200A |
| EM9100/B | Clamp Size: Φ 33/36/48mm |
| EM9150B | Automatic plug-in structure, safety & efficiency |
- High interference resistance, high accuracy, stable testing
 - Wireless communication function. Real-time results on handheld receiver



Large Caliber High/Low Voltage Clamp Current Meter

- | | |
|---------|-------------------------------|
| EM9200 | AC Current Range: ACOmA~1200A |
| EM9200B | Clamp size: Φ 68mm |
- Automatic plug-in structure, safety & efficiency
 - High interference resistance, high accuracy, stable testing
 - Wireless communication function. Real-time results on handheld receiver



High/Low Voltage Hook Type Current Meter

- | | |
|---------|---|
| EM9310 | AC Current Range: AC 0.00A~9999A |
| EM9310B | Clamp Size: Φ 68/128mm |
| EM9330B | U-shaped opening for unobstructed measurement |
- High interference resistance, high accuracy, stable testing
 - Wireless communication function. Real-time results on handheld receiver



Field Testing





Power Quality Analyzer Series



Power Quality Analyzer

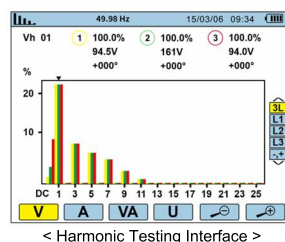
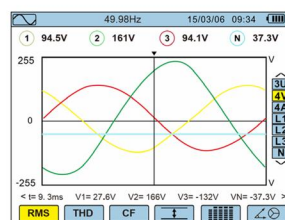
EM5000



- 4 channel current and 4 channel voltage measurement, simultaneously capturing and recording electric parameters and waveform, to provide with all the power quality information for working
- Many kinds of current sensors provide a choice to cope with variety of measurement site
- Comprehensive analysis and diagnosis all the voltage, current, power, electrical energy, har

Current Sensor Characteristics (Optional)

Current Sensor Model	Current Clamp	Current True RMS
EM008B CT Size: Φ8mm		10mA~99mA
		100mA~10.0A
EM040B CT Size: Φ40mm		0.10A~0.99A
		1.00A~100A
EM068B CT Size: Φ68mm		1.0A~ 9.9A
		10.0A~1000A
EM300F CT Size: Φ300mm		10A~99A
		100A~6000A



Touch Screen Type Power Quality Analyzer

EM5200
EM5230/A

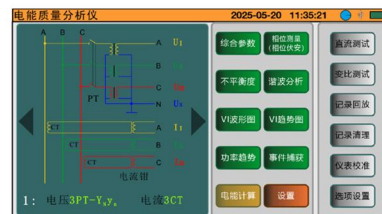


- 4-channels current and 3-channels voltage are measured simultaneously
- Multiple current sensors: Suitable for various scenarios

- Make comprehensive analysis and diagnosis of three phase power quality parameters
- One-key operations: Direct phase voltage, ratio testing, DC testing
- Touch colorful screen, simple human-machine operation, and switch with different operation language (Chinese & English)
- The test accuracy is 0.5 class, the test is stable and the anti-interference ability is strong
- Voltage flicker & surge detection: Monitors and records anomalies
- Startup & surge current monitoring: Records waveforms and parameters

Current Sensor Characteristics (Optional)

Current Sensor Model	Current Clamp	Current True RMS
EM015B CT Size: 17mmx18mm		AC 10mA~10.0A
EM042B CT Size: 35mmx40mm		AC 0.10A~100A
EM050B CT Size: Φ50mm		AC 1.0A~1000A
EM300FA CT Size: Φ300mm		AC 10.0A~6000A
EM035AD CT Size: Φ30mmx35mm		DC 0.0A-1000A
EM068AD CT Size: Φ68mm		DC 0.0A-1000A





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Wireless H/L Voltage Phase Detector Series



Wireless High Voltage Phase Detector

EM1050

- Phase detection voltage: AC10V~5kV
- Phase detection distance: 200m

- 3.5 inch LCD color screen, can display the phase, frequency, phase sequence, and Phase detection results with the same screen
- It has power detection function, Voltage level display function



Wireless High Voltage Phase Detector

EM1500

- Phase detection voltage: AC10V~500kV

EM1500A

- Phase detection distance: 200m

EM1500B

- (satellite Phase detection distance: 500km)

- 3.5 inch LCD color screen, can display the phase, frequency, phase sequence, and Phase detection results with the same screen
- It has power detection function, Voltage level display function



Ring Main Unit Wireless Phase Detector

EM1520

- Phase detection voltage: AC1V~600V

- Phase detection distance: 30m

- 3.5 inch LCD color screen, can display the phase, frequency, phase sequence, and Phase detection results with the same screen

- Suitable for Phase detection of ring network cabinet of power distribution system



Metalclad Withdraw Switchgear Wireless Phase Detector

EM1540

- Phase detection voltage: AC10kV~35kV

- Phase detection distance: 20m

- 3.5 inch LCD color screen, can display the phase, frequency, phase sequence, and Phase detection results with the same screen A, B and C phases complete the Phase detection simultaneously

- Phase comparison for handcart-type middle-mounted cabinets in power distribution systems



Multifunctional Wireless High Voltage Phase Detector

EM1560A

- Adopt with satellite timing technology, it can be used for remote phase detection or short-range phase detection

- Equip with 3 type phase detectors, which can be applied to different kinds of phase detection sites

- Equip with 3.5 inch LCD colorful screen, which can display the phase, frequency, phase sequence, and phase detecting results on the same screen

- With the functions of electricity testing and voltage level display



Field Testing





Infrared Thermometer/Thermal Imager Series



Infrared Thermometer

- | | |
|-------|--|
| EM550 | Temperature range: -50°C~550 / 950°C |
| EM950 | Single-point laser aiming, backlit display |
- MAX (highest), MIN (lowest), DIF (difference), AVG (average)
 - High temperature and low temperature both alarm, with data recording and other functions

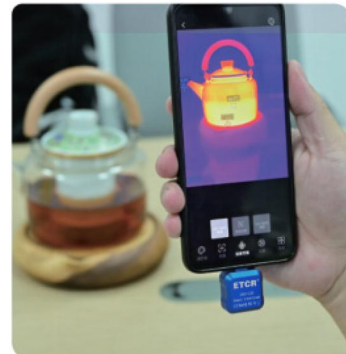


Thermal Imager

- | | |
|--------|--|
| EM160 | Infrared resolution: 160×120 / 256×192 / 384×288 |
| EM256 | 15 palettes that can be selected according to different scenarios and requirements |
| EM160M | Real-time temperature control alarm, custom high and low temperature alarm threshold |
| EM256M | |
| EM384 | |
- Multi-point intelligent measurement, support for flexible setting of temperature display
 - Infrared observation temperature / photo / video / image / temperature setting and other functions



Field Testing





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Leakage Protector(RCD) Tester Series



Portable Leakage Protector Tester

- EM8610
- Rated Voltage: AC 220V
- Test Current Range: 10~35mA (6gears)
- Leakage Current Action Time Range: 0.001s~1.000s
- Tests leakage action time of various leakage protection devices
- Equipped with a socket working status indicator light



Leakage Protector Tester

- EM8600
- EM8600A
- EM8600B
- EM8620
- EM8640
- Rated Voltage: AC 220V/380V
- Leakage Current Action Time Range: 0~999ms
- Multiple testing currents are available, which can test the tripping current
- Tests leakage action time of various leakage protection devices
- Color screen with wiring guidance, system clock, data lock function, etc



Product Model	Leakage Current Grade
EM8610	15 / 30 / 50 / 75 / 100 / 150 / 200 / 250 / 300 / 500mA
EM8600	3 / 5 / 7 / 10 / 15 / 20 / 30 / 35 / 50 / 100 / 125 / 150 / 175 / 250 / 75 / 300 / 375 / 500mA
EM8600A	5 / 10 / 15 / 20 / 30 / 40 / 50 / 60 / 100 / 150 / 200 / 250 / 300 / 500 / 600 / 1000mA
EM8600B	10 / 15 / 20 / 25 / 30 / 35mA
EM8620	5 / 15 / 30 / 50 / 75 / 100 / 150 / 200 / 250 / 300 / 500mA / 1000mA
EM8640	5 / 10 / 15 / 20 / 30 / 50 / 60 / 100 / 150 / 200 / 250 / 300 / 500 / 600 / 1000mA

Field Testing



< Socket Leakage Test >



< Leakage Switch Test >



High Voltage Electroscope/Voltage Alarm Series



Wireless High Voltage Detector

EM1800A	Electricity Testing Voltage Range: 240V~500kV(optional)
EM1800B	Current Range: 0.1A~6000A (only 1800B)
EM1820	Voltage To Earth Range: 0.1kV~150kV

- Wireless transmission, audible and visible alarm function and data upload function
- Hook Caliber: ϕ 50mm (EM1800A); ϕ 60mm (EM1800B)



Waterproof Approach Electric Alarm

EM1840	Alarm Voltage Range: 40V~500kV (optional)
--------	---

- Protection grade IP67, can be used for electric testing in the water
- All-round detect electric field
- Low power consumption, standby time up to 6 months
- Non-contact sensing technology and automatic trigger alarm function



Grounding Lead & Clip Device Approach Electricity Alarm

EM1850	Alarm Voltage Range: 40V~10kV
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- Multiple installation methods make installation and evacuation very convenient
- All-round induction the voltage source
- Low power consumption, standby time up to 6 months
- Non-contact sensing technology and automatic trigger alarm function



Wrist / Arm / Helmet Type Approach Electric Alarm

EM1860/C/E/P	Alarm Voltage Range: 40V~500kV (optional)
EM1860A/AC	All-directional induction voltage power source
EM1870/C	Multi-part wearing, suitable for different electrical testing scenarios
EM1880/C	

- Low power consumption, standby time up to 12 months
- Non-contact sensing technology and automatic trigger alarm function



High Voltage Anti-touch Smart Early Warning Device

EM1900	Alarm Voltage Range: 40V~500kV (optional)
--------	---

- Adopts a planar antenna to detect the environmental electric field in omni-directional of 360°, which can no dead angle for electricity testing.
- Users can choose the alarm sensitivity. The higher the sensitivity, the farther of the alarm distance
- Can set the alarm distance, which is suitable for special needs in specific situations
- Non-contact sensing technology, and sound and light alarm function





Please Scan QR Code For More Products

Phase Voltmeter/PT Voltage DropTester



Double Clamp Digital Phase Voltammeter

- | | |
|---------|--|
| EM4000 | ¶ CT Size: Φ 8mm/35mmX40mm |
| EM4000A | ¶ High accuracy, high stability, low power consumption |
| EM4020 | ¶ 2.8-inch TFT color display screen |
- ¶ USB interface, the store data up to 1200 groups
 - ¶ Equip with insulated non-slip sheath, all the banana plug and alligator clip have insulated protection



Three Phase Digital Phase Meter

- | | |
|--------|--|
| EM4300 | ¶ CT Size: Φ 8mm/35mmX40mm |
| EM4320 | ¶ High accuracy, high stability, low power consumption |
| EM4400 | ¶ USB interface, the store data up to 1000 groups |
- ¶ Equip with large LCD display screen, three-phase 4-wire and three-phase 3-wire system measurement.(only EM4400)
 - ¶ With large capacity lithium battery and Bluetooth communication (only EM4400)



Wireless Three Phase Digital Phase Voltam Meter

- | | |
|--------|-----------------------|
| EM4480 | ¶ CT Size: Φ 8mm |
|--------|-----------------------|
- ¶ Adopt with GPS satellite timing service and LORA wireless communication technology
 - ¶ 5-inch color display screen, large-capacity lithium battery, and USB interface
 - ¶ USB interface and Bluetooth communication, stored data up to 1000groups
 - ¶ With three-phase unbalance test, harmonic test and load test



Field Testing





Current/Voltage Online Tester Series



Wireless Leakage Current Online Monitor

EM8042
EM8072
EM8080

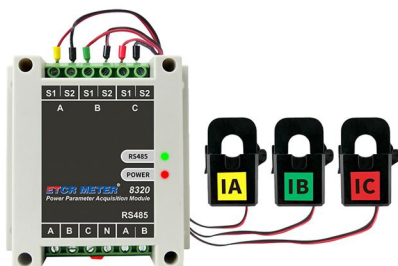
- CT Size: $\Phi 40/\Phi 70\text{mm}$
- The built-in communication module supports 4G communication mod
- With the function of waterproof and dust proof, with anti-theft function, equip with built-in electronic lock, protection grade IP65
- Ultra-long battery life, continuous online testing for 10 days
- Provide the test background software, and also can secondary development by user



Three Channels AC/DC Current Recorder

EM8300
EM8300A
EM8300D
EM8300F

- CT Size: $\Phi 8\text{mm} / 35\text{X}40\text{mm} / \Phi 200\text{mm}$
- Record 1~3 channel AC/DC leakage current and current
- System clock function. Data storage function, large storage space for 200,000 groups
- Equipped with a rechargeable lithium battery, it has a long battery life. In power-saving mode, it can work continuously for about 7 days. Data will not be lost when the battery is replaced

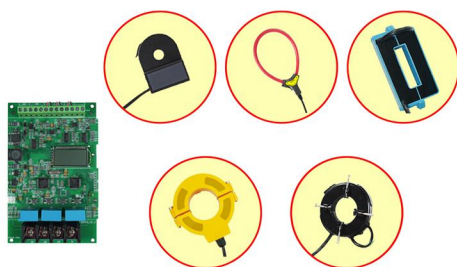


Power Parameter Acquisition Module

EM8320
EM8320B

- CT Caliber: $6\text{X}6\text{mm}/\Phi 60\text{mm}/65\text{X}68\text{mm}/64\text{X}16\text{mm}$
- The module can connect with 3 channels current sensor and 3 channels voltage

- Applicable to single-phase system and three-phase 4-wire system
- Adopt with split core type structure CT, which no need power off and disconnect the cable on site installation
- With RS485 communication function, B model with PLC communication



Multichannel Current & Voltage On-Line Detector

EM8340

- CT Caliber: $\Phi 40/\Phi 60/\Phi 100/65\text{X}68\text{mm}/64\text{X}16\text{mm}$

- Simultaneously monitor 6 channel of currents and voltage, and the number of loops can be customized
- Power supply with 6~24V wide voltage, and equip with LCD display.
- Adopt with split core type structure CT, which no need power off and disconnect the cable on site installation
- Provide RS485 communication function



Power Failure/Leakage Current Remote Alarm Monitor

EM8700

- Current Range: 0.00mA~60.0A AC

- CT Caliber: $\Phi 40\text{mm}$ (optional with $\Phi 10/\Phi 25/\Phi 80\text{mm}$)
- With GPRS, RS485 communication, and have SIM card slot function
- Remote online current/leakage current monitoring, leakage alarm, power failure alarm, normal power supply indication





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Other Electrical Test Instruments



Non-contact Phase Sequence Indicator adsorb

EM1000A	Clamp Wire Diameter: \varnothing 1.6mm~ \varnothing 40mm (optional)
EM1000C	Live Power Range: AC 70V~1000V
EM1000D	Non contact detection, no need to peel off the outer skin of the cable

- Dynamic audible and visual indicate the positive phase or reversed phase state of three-phase power phase sequence
- The meter button plate equip with 4PCS magnet(optional), which can on the metal shell of the device in testing



AC/DC Voltage Tester

- EM1810 Voltage Range: AC/DC 30V~35kV
- Equipped with sound and light alarm function, equipped with magnet ground line and clamp ground line. Especially suitable for line inspection and maintenance on subway
- Voltage to earth measurement, DC voltage measurement, AC voltage measurement, induced voltage measurement, electricity testing alarm



Lightning Protection Component (SPD) Tester

EM3800A	Varistor / Gas Discharge Tubes / TVS Tubes
EM3800A	The tester has stable output voltage up to 3000V
EM3850	The tester has step up speed setting, high voltage limit setting and qualified range setting function

- With the choice of single test mode and continuous test mode
- Can store 3000 groups of test records, USB interface. Adopt with large capacity rechargeable lithium battery



Standard Resistor For Lightning Protection

- EM3900 Resistance Range: 0.001 Ω ~100K Ω
- Four-wire connection method, power 1/2W
- High accuracy wire wound resistor which the highest accuracy of 0.05 %
- Fully meet the national weather service No.38 order "Lightning Protection Device Detection Qualification Management Approach" specified in the range of 10-3 ~ 105 Ω
- When calibrating resistors, direct shift and test without replacing the test line



Electrical Comprehensive/Installation Tester

- EM7700
- 7-inch touch color screen, test data is displayed on the same screen
- Built-in wiring connection diagrams of each functional module
- Earth resistance test, insulation resistance test, DC resistance test, leakage protector(RCD) test, electrical socket detection, electrical parameter measurement. etc. - multiple testing functions are modularized for operation, which is clear and convenient.





Other Power Test Instruments



Phase Line Identify Meter In Low-Voltage Transformer Areas

- | | |
|--------|---|
| EM1100 | Rated Voltage: Three phase 4-wire: 220V |
| EM1220 | Identify Success Rate >99% |
- Adopt with satellite communication technology, the communication distance is long
 - The transformer distribution network is fully covered, and the phase line judgment is fast, accurate and intuitive
 - Used for identifying the low-voltage power supply lines in the same transformer area



Overhead Line Grounding Fault Detector

- | | |
|---------|---|
| EM1400 | Output voltage with 2gears selection: 8000V/3000V |
| EM1400C | 4G/LORA double communication mode, testing is fast and accurate |
- With strong short-circuit detection capability, which can detect the direct short -circuit fault of the ground resistance is 0Ω
 - No external power supply required, the dectecor can continue working for 10hours with full charge
 - Testable for grounding faults of bare wire cables or insulated wire cables



Low-Voltage Leakage Locator

- | | |
|--------|--|
| EM1420 | Finding and locating the leakage faults while the power network is operating |
|--------|--|
- Assist the worker finding and locating the leakage faults sites
 - With the functions of Bluetooth communication, data storage and automatic shutdown



Wireless PT Secondary Voltage-Drop /Load Tester

- | | |
|--------|---------------|
| EM4500 | CT Size: Φ8mm |
|--------|---------------|
- Adopt with GPS satellite timing sevice and LORA wireless communication technology
 - 5-inch touch colorful screen, large-capacity lithium battery
 - USB interface, Bluetooth communication, store data up to 1000groups
 - With the function of secondary voltage drop , harmonic analysis, and load testing



Transformer Core Earth Current Tester

- | | |
|---------|-------------------------------|
| EM8100 | CT Caliber: 80mmX80mm |
| EM8100B | Current Range: AC 0.00mA~100A |
| | Frequency Range: 10Hz~1000Hz |
- Adopts 3.5 inch colorful touch screen, real-time display the measured current value and waveform
 - Alarm function, data storage function, time setting function, serial number setting function





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Other Power Test Instruments



Live Zinc Oxide Arrester Clamp Tester

- | | |
|--------|----------------------------------|
| EM9400 | ¶ CT Caliber: $\Phi 40\text{mm}$ |
|--------|----------------------------------|
- ¶ Measurement Range: AC 0.000mA~300.0mA (True RMS)
 - ¶ There is no need to cut off power supply during the test, no need to remove the arrester
 - ¶ With microampere level leakage current test ability, which can test 1uA weak current
 - ¶ Adopt wireless communication mode, the master instrument can close or open the detector remotely

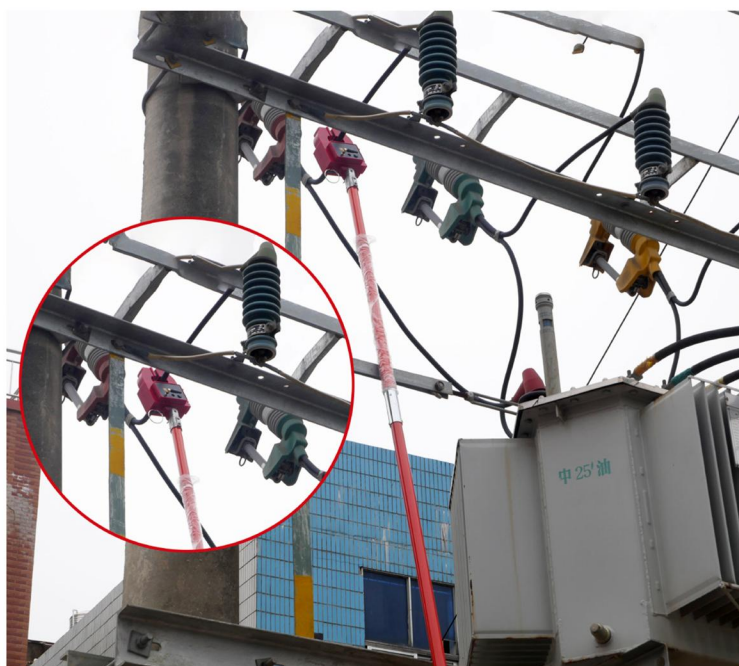


Wireless CT Transformation Ratio Tester

- | | |
|-------------|---|
| EM9500B | ¶ CT Caliber: 17X18mm/ $\Phi 48\text{mm}$ / $\Phi 200\text{mm}$ |
| EM9500C-030 | ¶ Current range: 0A~600A |
| EM9550B | ¶ Transformation Ratio Measurement Range: 1~9999 |
| EM9570 | ¶ Harmonic Measurement: 2~31 orders(only EM9570) |
- ¶ With the functions of Bluetooth communication, data storage and automatic shutdown



Field Testing



< Current Testing Of Zinc Oxide Arresters >



< Ratio Current Test >



Current Sensor Series



Clamp Current Sensor

EM008/014/015	Clamp Size: $\Phi 16-18 \times 80$ mm(optional)
EM016/030/040/068/080	Current Range: AC 0.00mA~1200A(optional)
EM030A/040A/068A/080A	Working frequency: 10Hz~100kHz
EM050/050A/070/070A	Output interface: BNC plug, or 4.0mm Double banana plug/3.5mm audio plug/bare wire
EM033H/048HA	Using a polymetallic alloy core and non-contact measurement, it is safe and reliable
EM040HA/068HA	

No need to interrupt the power supply and disconnect the circuit in testing, easy to carry and especially suitable for on-site online testing



AC/DC Clamp Current Sensor

EM007AD	Clamp Size: $\Phi 7-\Phi 68$ mm(optional)
EM017AD	Current Range: DC/AC 0mA~1500A(optional)
EM035AD	Working frequency: DC~400Hz
EM068AD	Output interface: BNC plug, or 4.0mm Double banana plug/3.5mm audio plug/bare wire
EM030D	Adopts Hall induction technology, non-contact measurement, safe and reliable

No need to interrupt the power supply and disconnect the circuit in testing, easy to carry and especially suitable for on-site online testing



Split Type Leakage Current Sensor

EM010K/025K/040K/080K	Clamp Size: $\Phi 10-\Phi 90$ mm(optional)
EM15KM/030KM/050KM	Current Range: AC 0.00mA~60A(optional)
EM065KM	Working frequency: 10Hz~100kHz
EM082K/085K	Output interface: BNC plug, or 4.0mm Double banana plug/3.5mm audio plug/bare wire
EM022KU/045KU	Adopts Permalloy core and CT double-layer shielding technology, non-contact measurement
EM080KU	
EM145C	Output current or voltage signal
EM200C	

No need to interrupt the power supply and disconnect the circuit in testing, especially suitable for on-site online testing



Split Type DC Current Sensor

EM010KD	Clamp Size: $\Phi 10/\Phi 25$ mm(optional)
EM025KD	Current Range: DC 0.0mA~100mA

Output interface: 4-core wire or 5P connection terminal output
 Adopts Permalloy core and CT double-layer shielding technology, non-contact measurement
 No need to interrupt the power supply and disconnect the circuit in testing, especially suitable for on-site online testing



Flexible Coil(Rogowski Coil)Current Sensor

EM001F	Clamp Size: $\Phi 50$ mm- $\Phi 3000$ mm(optional)
EM002F	Response Frequency: 0.1Hz~1MHz
EMFA	0A~10000A~larger Resolution:10mA
EMFB	Line voltage: Below AC 1000V line test

The coil length and interface can be customized according to user requirements



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Three-Phase Unbalance Correction Device



Three Phase Unbalance Control Device For Commutation Switch

- EM5500**
- Equal voltage 0ms seamless phase change technology
 - Through wireless communication methods such as LORA, RS485, and Bluetooth
 - There is no inrush current in phase changing process, stable and reliable
 - Precise positioning phase converter ensures the balance of each branch of the distribution network hop by hop
 - With the functions of energy conservation and loss reduction, long phase-change life, and automatic bypass

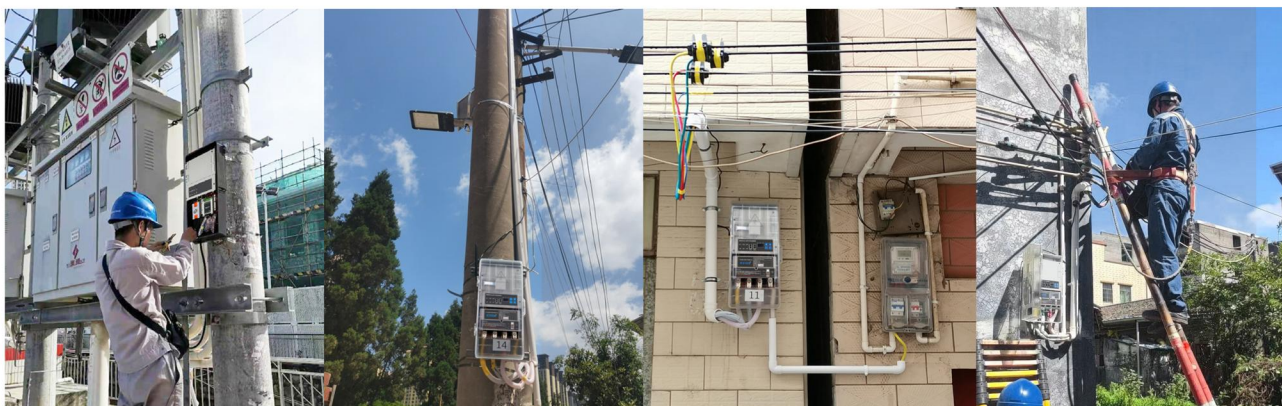


Swapping Type Low-Voltage Treatment Device

- EM5600**
- Equal voltage 0ms seamless phase change technology
 - The interlocking technology combining software and hardware, without the risk of interlocking short circuits
 - There is no inrush current in phase changing process, stable and reliable
 - Precise positioning phase converter ensures the balance of each branch of the distribution network hop by hop
 - With the functions of energy conservation and loss reduction, long phase-change life, and Bluetooth communication



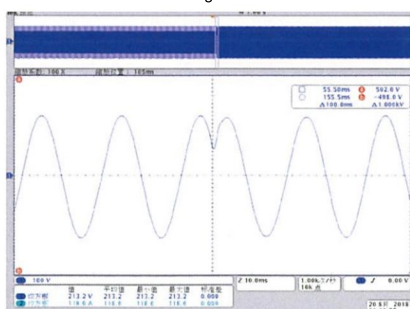
Field Testing



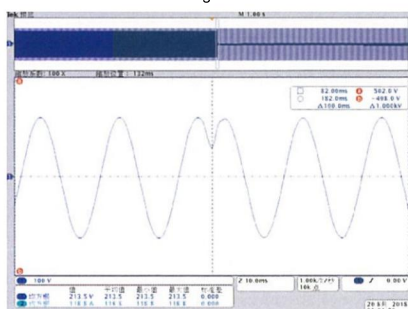
< Pole Mounting >

< Wall Mounting >

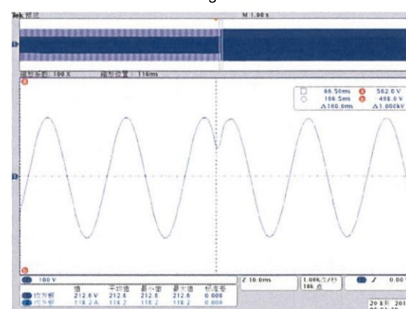
The time for switching from phase A to phase B is 0 ms. The switching waveform is:



The time for switching from phase B to phase C is 0 ms. The switching waveform is:



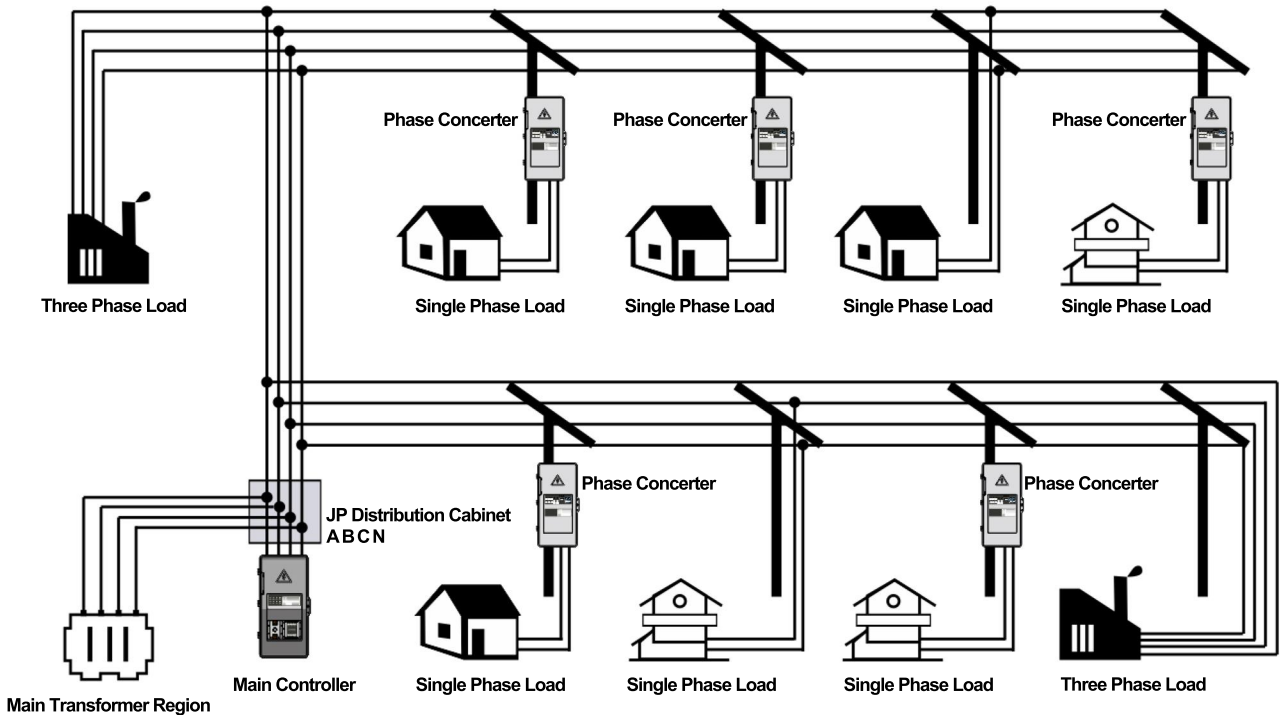
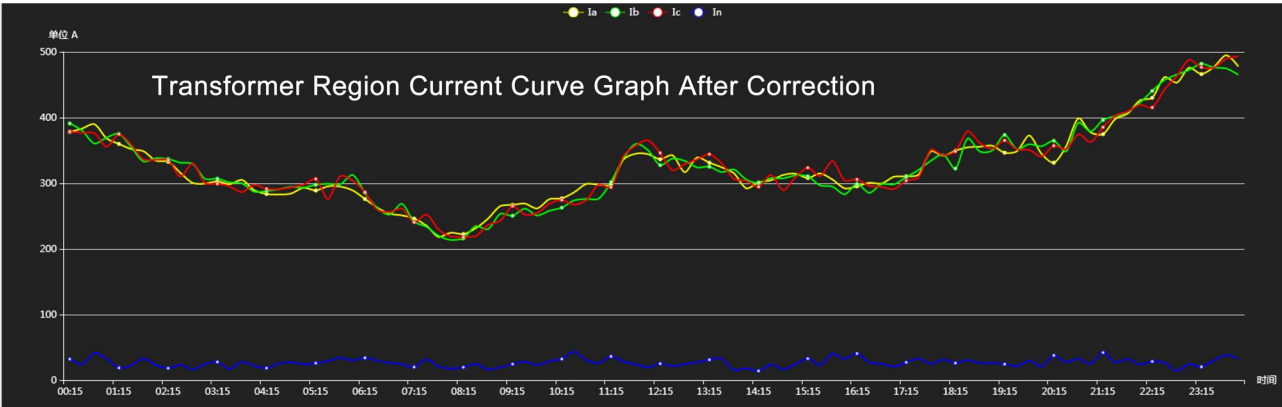
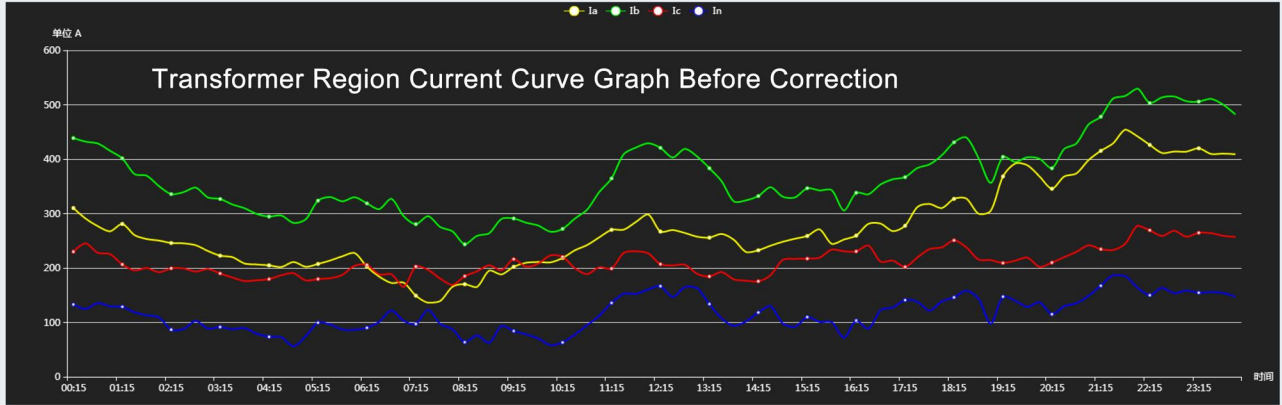
The time for switching from phase C to phase A is 0 ms. The switching waveform is:



< Zero-Millisecond Phase-Shifting Technology Waveform Diagram >



Three-Phase Unbalance Correction Device



< Installation Instruction >



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