

**ETCR METER®**

## **ANALIZADOR DE CALIDAD DE ENERGÍA ETCR5200**



Este instrumento se caracteriza por su inteligencia, funcionalidad integral, fácil manejo y una interfaz bilingüe en chino e inglés. Incorpora una pantalla táctil a color de 5 pulgadas, compacta, ligera y fácil de transportar.

### **Características del producto:**

1. Realice un análisis y diagnóstico exhaustivo de todos los parámetros eléctricos como voltaje, corriente, potencia, energía eléctrica, armónicos, fase, etc.
- 2.4 pinzas amperimétricas, adecuadas para varios sitios.
- 3.4 canales de medición de corriente y voltaje, mientras captura y registra parámetros eléctricos y formas de onda.
4. Gran pantalla LCD a color de alta resolución.
5. Interfaz de operación bilingüe en chino e inglés.
6. Tarjeta de memoria TF: 8G.
7. Interfaz de comunicación USB.

### **Funciones del producto:**

1. Visualización de la forma de onda en tiempo real (3 canales de voltaje/4 canales de corriente).
2. Valor efectivo real de voltaje y corriente.
3. Visualización del diagrama fasorial.
4. Medición de armónicos en cada fase, hasta 50 armónicos.
5. El gráfico de barras muestra el contenido armónico de la corriente y el voltaje de cada fase.
6. Distorsión armónica total (THD).

8. Gráfico de tendencias de voltaje, corriente y potencia.
9. Valor de potencia activa/reactiva/aparente y valor total de cada fase.
10. Medición de desequilibrio trifásico (voltaje y corriente).
11. Registro de forma de onda y parámetros.
12. Captura de pantalla.
13. Operación con pantalla táctil.
14. Fluctuación de voltaje a corto plazo.
15. Monitoreo de corriente de arranque y sobrecorriente.
16. Interfaz de comunicación USB y comunicación superior con computadora.
17. Se puede configurar el método de cableado del instrumento y el tipo de red eléctrica.



## PRODUCT SHOW



## Característica de la pinza amperimétrica:

| Current Sensor Model                | Clamp Current Sensor                                                              | Current True RMS | Range | Current True RMS Max Error | Phase Angle $\phi$ Max Error |
|-------------------------------------|-----------------------------------------------------------------------------------|------------------|-------|----------------------------|------------------------------|
| ETCR200F<br>CT: $\Phi 200\text{mm}$ |  | 10A~99A          | 6000A | $\pm(1\% + 3\text{dgt})$   | $\pm(3^\circ)$               |
|                                     |                                                                                   | 100A~6000A       |       | $\pm(1\% + 3\text{dgt})$   | $\pm(3^\circ)$               |

### 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;<br>Clamp current sensor 042B: $\Phi 40\text{mm}$<br>Clamp current sensor 050B: $\Phi 50\text{mm}$<br>Flexible coil current sensor 300FA: $\Phi 300\text{mm}$ |
| Meter Dimension                 | 240mmX170mmX68mm                                                                                                                                                                                   |
| Channel                         | 3 channels voltage, 4 channels current                                                                                                                                                             |
| Voltage Range                   | 2V~600V                                                                                                                                                                                            |
| Current Range                   | Clamp current sensor 015B: 10mA~10.0A<br>Clamp current sensor 042B: 0.1A~100A<br>Clamp current sensor 050B: 1A~1000A<br>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                                                                                                                                                                                                |
| 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: 1M $\Omega$                                                                                                                                                          |
| 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 $\geq 10\text{M}\Omega$                                                                                                                                 |
| 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°C~40°C; Below 80%RH                                                                                                                                                                            |
| Storage Temperature             | -10°C~60°C; 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                 | $\pm(0.03)\text{Hz}$                                                                                                                                   |
| Voltage True RMS                                                             | 2V~600V           | Min resolution 0.001V   | $\pm(0.5\%F_s)$                                                                                                                                        |
| Current True RMS                                                             | 10mA~6000A        | Min resolution 0.001A   | $\pm(0.5\%F_s)$                                                                                                                                        |
| Active Power                                                                 | 0.0000W~3600kW    | Min resolution 0.001W   | $\pm(1\%+3\text{dgt})$ ; $\text{Cos}\varphi\geq 0.8$                                                                                                   |
|                                                                              |                   |                         | $\pm(1.5\%+10\text{dgt})$ ; $0.2\leq\text{Cos}\varphi<0.8$                                                                                             |
| Reactive Power                                                               | 0.000VAR~3600kVAR | Min resolution 0.001VAR | $\pm(1\%+3\text{dgt})$ ; $\text{Sin}\varphi\geq 0.5$                                                                                                   |
|                                                                              |                   |                         | $\pm(1.5\%+10\text{dgt})$ ; $0.2\leq\text{Sin}\varphi<0.5$                                                                                             |
| Apparent Power                                                               | 0.0000VA~3600kVA  | Min resolution 0.001VA  | $\pm(1\%+3\text{dgt}\%)$                                                                                                                               |
| Power Factor                                                                 | -1.000~1.000      | 0.001                   | $\pm(1.5\%+3\text{dgt})$ ; $\text{Cos}\varphi\geq 0.5$                                                                                                 |
|                                                                              |                   |                         | $\pm(1.5\%+10\text{dgt})$ ; $0.2\leq\text{Cos}\varphi<0.5$                                                                                             |
| Phase Angle                                                                  | 0°~360°           | 0.001°                  | $\pm(2^\circ)$                                                                                                                                         |
| Voltage Harmonic Ratio 1~50 Orders ( $V_{\text{rms}}>50\text{V}$ )           | 0.0%~99.9%        | 0.001%                  | (1~20 orders) $\pm(1\%\text{rdg}+5\text{dgt})$<br>(21~30 orders) $\pm(1\%\text{rdg}+10\text{dgt})$<br>(31~50 orders) $\pm(1\%\text{rdg}+15\text{dgt})$ |
| Voltage Harmonic Angle ( $V_{\text{rms}}>50\text{V}$ )                       | 0°~360°           | 0.001°                  | $\pm(3^\circ)$ harmonic 1~25 orders                                                                                                                    |
|                                                                              |                   |                         | $\pm(10^\circ)$ harmonic 26~50 orders                                                                                                                  |
| Current Harmonic Ratio 1~50 Orders ( $I_{\text{rms}}>I_{\text{range}}/100$ ) | 0.0%~99.9%        | 0.001%                  | (1~20 orders) $\pm(1\%\text{rdg}+5\text{dgt})$<br>(21~30 orders) $\pm(1\%\text{rdg}+10\text{dgt})$<br>(31~50 orders) $\pm(1\%\text{rdg}+15\text{dgt})$ |
| Current Harmonic Angle ( $I_{\text{rms}}>I_{\text{range}}/100$ )             | 0°~360°           | 0.001°                  | $\pm(3^\circ)$ harmonic 1~25 orders<br>$\pm(10^\circ)$ harmonic 26~50 orders                                                                           |
| Total Harmonic Rate (DF or THD-F) $\leq 50$                                  | 0.0%~99.9%        | 0.001%                  | $\pm(1\%\text{rdg}+10\text{dgt})$                                                                                                                      |
| Distortion Factor (DF or THD-R) $\leq 50$                                    | 0.0%~99.9%        | 0.001%                  | $\pm(1\%\text{rdg}+10\text{dgt})$                                                                                                                      |
| Three-phase Unbalance                                                        | 0.0%~100 %        | 0.1%                    | $\pm(1\%)$                                                                                                                                             |

## ACCESSORIES

