元星电子
YUANXING

PROVIDING RELIABLE CURRENT AND VOLTAGE MEASUREMENT SOLUTIONS TO GLOBAL USERS

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HIGH VOLTAGE CABLE CONDITION DETECTION SENSORS

- TRAVELING WAVE CURRENT SENSOR
- LOAD/FAULT CURRENT SENSOR
- PARTIAL DISCHARGE/HIGH FREQUENCY CURRENT SENSOR
- GROUNDED CIRCULATION SENSOR
- POWER HARVESTING CURRENT TRANSFORMER

TRAVELING WAVE CURRENT SENSOR

TECHNICAL PARAMETERS

- Measurement range: 1A-100kA
- Signal transfer ratio: 7mV/kA@50Hz
- Bandwidth: 50Hz-10MHz
- Protection grade: IP68, meet the requirements of outdoor use
- Window size: 60mm-250mm (customized)
- Fast response time, for pulse signal measurement

LOAD/FAULT CURRENT SENSOR

TECHNICAL PARAMETERS

- Measuring range: 0.1A-100kA
- Signal transfer ratio: 100mV/kA@50Hz
- Bandwidth: 10Hz-100kHz
- Protection grade: IP68, to meet the requirements of outdoor use
- Window size: 60mm-250mm (customized)

POWER HARVESTING CURRENT TRANSFORMER

TECHNICAL PARAMETERS

- Device start-up current: 15A (two power harvesting CTs drive the power conversion device at the same time)
- Maximum input current: 600A, instantaneous current 1200A
- Output power: 1-4W optional
- Output voltage: 24V, 15V, 12V, 5V, etc.
- Window size: maximum 180mm (customized)

PARTIAL DISCHARGE/HIGH FREQUENCY CURRENT SENSOR

TECHNICAL PARAMETERS

- Transmission impedance: 17mV/mA (typical)
- Operating bandwidth: 0.1MHz-100MHz
- Sensitivity: <5pC
- Matching impedance: 50Ω
- Output interface: BNC/TNC/SMA
- Protection grade: IP68
- Window size: open and close 30mm-200mm, (customized)

GROUNDED CIRCULATION SENSOR

OPTION 1: ROGOWSKI COIL TO MEASURE

- Wide measuring range, good linearity, can capture fault signal;
- Signal transfer ratio: 100mV/kA@50Hz
- Bandwidth: 10Hz-100kHz
- Protection level: IP68, meet the requirements of outdoor use
- Metal casing, effectively shielding electromagnetic wave interference
- Window size: 60mm (customized)

OPTION 2: TRANSFORMER TO MEASURE

- Ratio: 1000A/1000mA (customized, 50HZ)
- Accuracy: 0.5 grade
- Protection level: IP68, to meet the requirements of outdoor use
- Window size: 60mm

HALL EFFECT CURRENT/VOLTAGE SENSORS

- Hall effect current/voltage sensors, based on the Hall effect principle, are divided into two categories: open-loop direct measurement type and closed-loop compensation type. The magnetic flux generated by the measured primary current is detected by Hall elements placed in the air gap of the magnetic core. After subsequent circuit processing, the changes in primary current and voltage can be accurately reflected at the sensor output end. This type of product has the characteristics of high accuracy, fast response time, wide frequency band, etc. It can isolate and measure various signals such as DC, AC, pulse, etc. It is widely used in industrial control, power, rail transit and other fields.

APPLICATIONS

- Power system
- Photovoltaic new energy;
- UPS power supply;
- Frequency converters;
- Servo motors;
- Electric welding machines;
- Electric locomotives;
- Automotive electronics;
- Aerospace

TECHNICAL PARAMETERS

- Measurement range: 0-3000A (current); 0-2000V (voltage)
- Accuracy: ± 0.5% (closed-loop); ± 1% (open loop)
- Power supply: ± 12V; ± 15V; ± 24V; + 12V; + 24V
- Response time: <1uS (closed-loop); < 10uS (open loop)

DC LEAKAGE CURRENT SENSOR

- The DC leakage current sensor adopts the working principe of magnetic modulation and is applied to devices such as DC screens to accurately measure mA level DC leakage current signals. Adopting a through type input method, the output signal has two modes: analog signal and RS485 digital signal. Multiple external structures such as split core, multi integrated and so on, can meet different application requirements.

APPLICATIONS

- Online insulation monitoring of DC power supply system
- DC screen
- Current difference measurement
- Signal and line monitoring

TECHNICAL PARAMETERS

- Measuring Range: 0-±10mA, 0-±500mA, 0-±1A etc.
- Output Signal: 0-±5V; RS485
- Accuracy: ±1%
- Power Supply: ±12V; ±15V

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Current Sensor for Substation High-voltage Equipment Insulation Online Monitoring
Current Sensor for High Voltage Cables Condition Monitoring
Hall Effect Sensor
Current Sensor for DC Insulation Monitoring

SHANDONG YUANXING ELECTRONICS CO., LTD.

COMPANY PROFILE

CE RoHS

Founded in March 1999, YUANXING is an industrial leader in providing innovative, high-quality, high-reliability current / voltage converter and isolation sensor solutions for global users. Our products are widely used in power, telecommunication, aviation, railway, rail transportation, clean energy, electric vehicle, industrial automation and other fields.

YUANXING's technologically advanced product development, engineering, and lean manufacturing teams are committed to providing standardized or individualized customization services to meet the needs of users in emerging technologies and applications. after more than 20 years of development, YUANXING has the most complete product range in the global current and voltage converter and isolation sensor industry, and also becomes one of the most competitive companies in the industry.

YUANXING has more than 500 employees, with an annual production capacity of more than 30 million current and voltage sensors. Many of our products have passed the safety certification of European CE laboratory and American UL laboratory, and we have a North American sales office in Tacoma, Washington, USA. YUANXING has become an important supplier of current and voltage sensors to China's State Grid, Southern Power Grid, Guodian Nanzi, Guodian Nanrui, and the world's industrial electrical giants Siemens, Schneider and Emerson.

CURRENT SENSOR FOR ON-LINE MONITORING OF ARRESTER INSULATION

FEATURES

- Through-centre structure, aperture diameter 6mm-40mm, can be customized
- High sensitivity design, high precision
- Double shielding technology design, strong anti-interference ability
- Lightning protection design, withstand high current shock
- Built-in lightning strikes or lightning current amplitude measurement coil
- Waterproof metal casing, suitable for indoor and outdoor environments.

APPLICATIONS

- Surge arrester insulation online monitoring devices
- Capacitive equipment insulation online monitoring devices

TECHNICAL PARAMETERS

- Working frequency: 50 (400Hz)
- Measuring range: 10uA~700mA or customized
- Output signal: 0~7V or customized
- Accuracy: 0.05 per cent
- Power supply voltage: ±12V or ±15V
- Power consumption: <10mA
- Ambient Temperature: -40°C~+85°C

SENSOR FOR TRANSFORMER CORE/CLAMP GROUND CURRENT MEASUREMEN

FEATURES

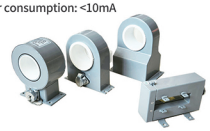
- Through-centre structure, aperture diameter 50mm-100mm, can be customized
- Dual range design, high precision, good linearity, wide measuring range
- Double shielding technology design, strong anti-interference ability
- Aviation plug, lead wire and other output methods can be selected.
- Waterproof metal shell can be installed in outdoor environment.

APPLICATIONS

- Transformer core earth current monitoring devices

TECHNICAL PARAMETERS

- Working frequency: 50(400Hz)
- Measuring range: 1mA~10A,1mA~30A or customer's requirement.
- Output signal: 0~7.07V; RS485 or customized
- Accuracy: 0.05 per cent
- Power supply voltage: ±12V or ±15V
- Power consumption: <10mA



CURRENT SENSOR FOR PARTIAL DISCHARGE OF TRANSFORMER

FEATURES

- Installed in the core grounding, clamp grounding, neutral ground, real-time monitoring of the local discharge signal generated during the operation of the transformer, and provide it to the back-end device analysis, through the back-end data analysis to facilitate the understanding of the internal insulation condition of the transformer, and take timely and appropriate maintenance and protection measures.

APPLICATIONS

- High Voltage Transformer Local Discharge Monitoring

TECHNICAL PARAMETERS

- Operating frequency: 50kHz-50MHz
- Transmission impedance: ⩾17mV/mA;
- Matching impedance: 50 ohms
- Sensitivity: 5PC
- Output interface: BNC, TNC or SMA
- Operating temperature: -40 °C ~ +85 °C

TRANSFORMER BUSHING END SCREEN CURRENT SENSOR

FEATURES

- High safety. No change to the original grounding method
- High reliability. Internal potting, protection class IP67
- High sensitivity. Built-in high-frequency and low-frequency sensors can detect 5pC local discharge signals and uA level ground currents.
- Convenient installation. The structure is completely interchangeable with various casing end-screen covers in use, compatible with customization. Wide applicability

APPLICATIONS

- High voltage transformer end screen current monitoring devices

TECHNICAL PARAMETERS

Low Frequency Measurement	High frequency measurement
Measurement range: 0-1000mA; Accuracy: 0.02% Phase difference: <2'	Transmission impedance: ⩾12mV/mA; Operating frequency: 50kHz-50MHz Sensitivity: 5PC

FLEXIBLE ROGOWSKI COIL

FEATURES

- No magnetic saturation, wide measurement range (0.1A-100kA), multiple specifications available;
- Wide bandwidth range (1Hz-10MHz);.
- Small installation space required, light weight, soft and lightweight;
- Good linearity and small positional error;
- No danger of secondary open circuit;
- Fast response speed
- Can be customized according to requirements

APPLICATIONS

- Measurement of AC high current; fault current

FLEXIBLE ROGOWSKI COIL DIAGRAM