





### Product Function

Applied to loop earth resistance system online monitoring, metal loop connection resistance online monitoring, grounding status monitoring.

### Product Features

1. Sensors and PCB modules are provided to facilitate user secondary development of grounding resistance online monitoring products.
2. Non-contact measurement technology, safe and reliable, easy to install. The grounding down leads passes through the tester perforation directly, not affect the lightning protection grounding effect and the normal operation.
3. ETCR2800T adopts 304 stainless steel shell, internal filling and sealing resin, strong structure, anti-explosion, anti-impact, high and low temperature resistance, waterproof and dustproof, suitable to use in any weather. Especially suitable for installation and using in outdoor, oil depot, gas station. Explosion-proof mark: Ex ia II BT3Ga, explosion-proof certification: CE23.3868X.
4. ETCR2800X split core large caliber sensor, which is suitable for 130mm wide flat steel grounding pile, and no need to disconnect the grounding down lead when installation, convenient and efficient.
5. Equipped with RS485 (support MODBUS-RTU communication protocol) or 4G communication module(optional), connected with the user computer to remote real-time monitoring.

### Technical Specification

	<i>ETCR2800E</i>	<i>ETCR2800N</i>	<i>ETCR2800T</i>	<i>ETCR2800X</i>
<b>Model</b>				
<b>Sensor Perforation Size</b>	Φ17mm	65mmX36mm	53mmX20mm	130mmX20mm
<b>Sensor Size</b>	110mmX80mmX55mm	110mmX80mmX55mm	160mmX90mmX125mm	245mmX115mmX56mm
<b>Weight</b>	334g	715g	2176g	1950g
<b>Measurement Range</b>	0.01Ω~100Ω			0.01Ω~10Ω
<b>Resolution</b>	0.001Ω			
<b>Accuracy</b>	±2%rdg±3dgt (20℃±5℃, below 70%RH)			
<b>Power Supply</b>	6VDC~12VDC, 50mA Max. (External power supply)			
<b>LCD Size</b>	47mmX28.5mm			
<b>PCB Size</b>	75mX×54mmX22mm			
<b>Installation Requirements</b>	Installed in outdoor, and the circuit boards need to be placed in other protective boxes			
<b>Single Measurement Time</b>	0.5s			
<b>PCB Interface</b>	J1: Signal output, power input interface J2: Sensor and PCB interface			
<b>J1 Mark</b>	P+: Power input positive; R+: Signal output positive P-: Power input ground; R-: Signal output negative GND: Signal ground, short connect with power input ground (P-)			
<b>J2 Mark</b>	I+, I-Current coil interface; U+, U-Voltage coil interface GND: Common ground			
<b>Communication Mode</b>	RS485 (supports MODBUS-RTU communication protocol) or 4G communication (optional)			
<b>Overflow Indication</b>	Display value> 100Ω, communication send "OLΩ" command			
<b>Explosion-Proof Mark</b>	Ex ia II BT3Ga			
<b>External Magnet</b>	<40A/m			

<b>External Electric Field</b>	<1V/m
<b>Shift</b>	Automatically
<b>Normal 4G Version</b>	LTE-FDD B1/B3/B5/B8 LTE-TDD B34/B38/B39/B40/B41
<b>Global 4G Version</b>	LTE-FDD B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28 LTE-TDD B38/B39/B40/B41 WCDMA B1/B2/B4/B5/B6/B8/B19 GSM B2/B3/B5/B8
<b>Accessories</b>	Sensor: 1PCS; PCB Module: 1PCS; Connection line: 1PCS; Signal wire: 1PCS; Hex wrenches:1PCS(only for ETCR2800X)

