

高频局放电流传感器

HIGH FREQUENCY PARTIAL DISCHARGE CURRENT SENSOR

物联网电流传感器生产商
IOT CURRENT SENSOR MANUFACTURER



专业，方能体现品质和效率
Professional, can reflect quality and efficiency

HFCT 高频局放电流传感器

HIGH FREQUENCY PARTIAL DISCHARGE CURRENT SENSOR

YUCHENG

> 产品概述 Product overview

当电缆内部发生局部放电时，高频电流会沿着接地线向大地传播。通过在地线上安装传感器，检测高频电流信号实现局放检测。

环流传感器使用罗氏线圈工作方式，传感器的测量回路与被测电流之间没有电气联接，属于非侵入式检测法，被测设备不需要停运。

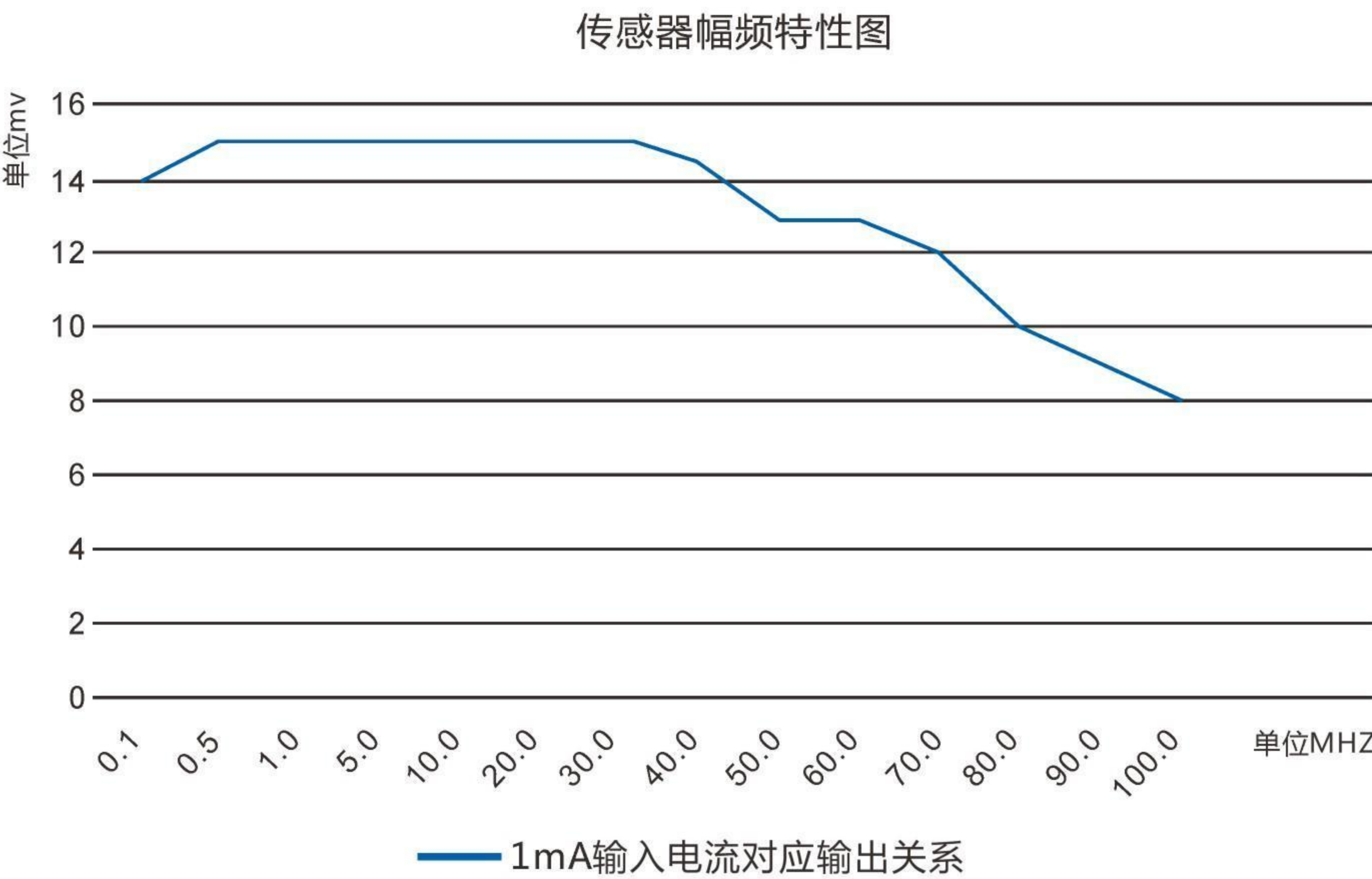
When partial discharge occurs inside the cable, the high-frequency current will propagate to the ground along the ground wire. A sensor is installed on the ground cable to detect high-frequency current signals for local discharge detection.

The circulation sensor uses the Roche coil working mode, and there is no electrical connection between the measurement loop of the sensor and the measured current, which belongs to the non-invasive detection method, and the equipment under test does not need to be shut down.

> 产品特点 Product features

- ◆ 局部放电传感器与护层环流传感器集成
 - ◆ 响应速度快，可达到ns级别
 - ◆ 频带宽，频率满园300KHZ-100MHZ
 - ◆ 线性度好，精度高
- ◆ The partial discharge sensor is integrated with the sheath circulation sensor
 - ◆ Fast response speed, up to ns level
 - ◆ Wide frequency band, frequency full circle 300KHZ-100MHZ
 - ◆ Good linearity, high precision

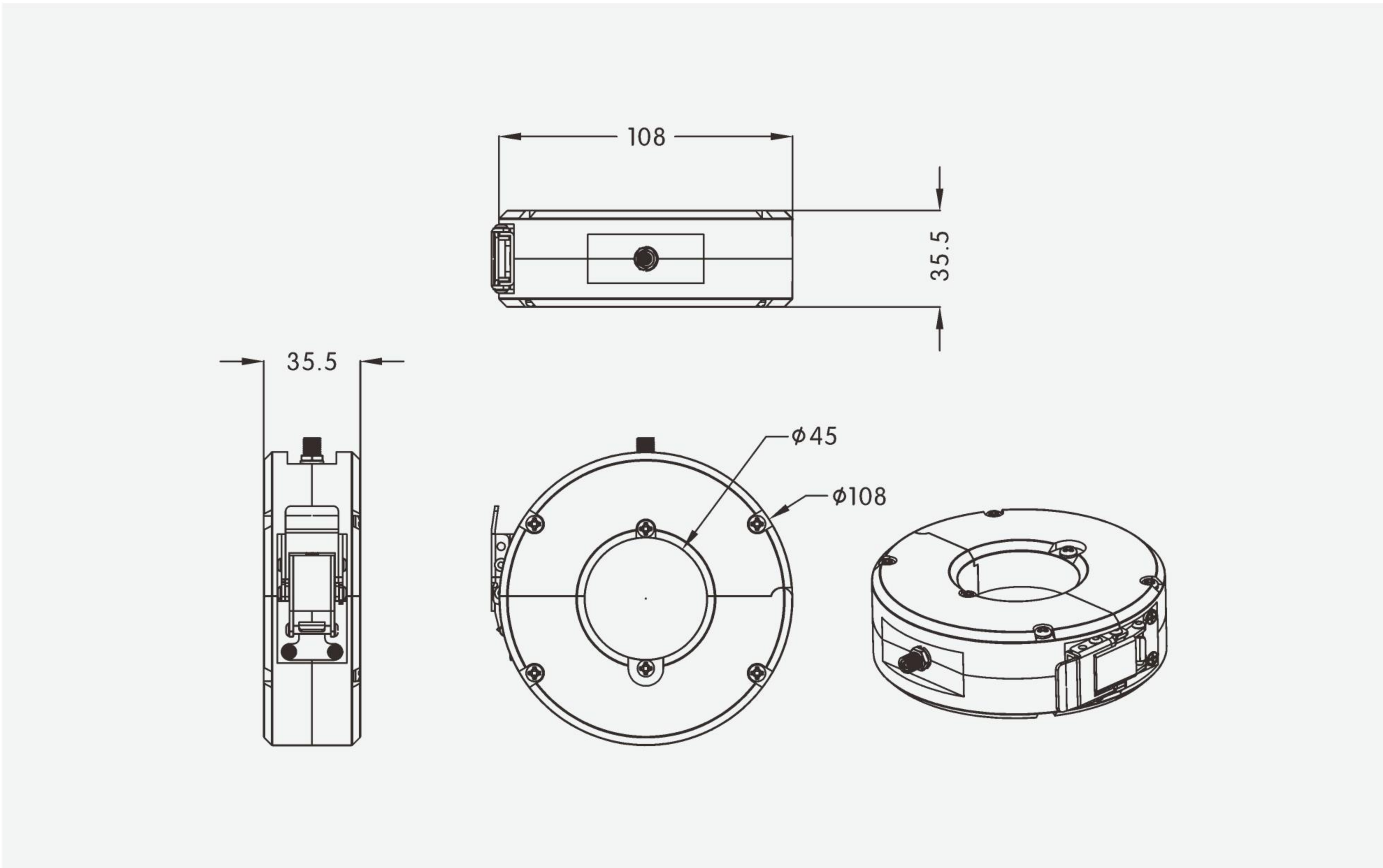
> 传感器幅频特性图 Sensor amplitude-frequency characteristic diagram



> 技术参数 Technology parameter

局放传感器 Local discharge sensor	性能指标 Performance index	护层环流传感器 Sheath circulation sensor	性能指标 Performance index
工频频率范围 Operation frequency range	0.3M Hz- 100M Hz	测量范围 Measuring range	0.1A~1 K A
灵敏度 Sensitivity	0.1 pc	额定输出 Rated output	500mV/1000A 50Hz
传输阻抗 Transmission impedance	15mv/mA	位置灵敏度值 Position sensitivity value	± 1.5%
匹配阻抗 Matched impedance	50 Ω	测量精度 Measurement accuracy	± 0.5%
通用要求 General requirement			
防护等级 Class of protection	IP68	工作温度 Operating temperature	-40℃~70℃
孔径 Aperture	Φ 45mm	储存温度 Storage temperature	-40℃~100℃
输出接口 Output interface	线长 5 米，波纹套管，局放 BNC 接头，环流传感器接 M12 航空插头。 Line length 5 meters, corrugated sleeve, local discharge BNC connector, circulation sensor with M12 aviation plug.		

> 外形及安装尺寸 Outline and installation dimensions



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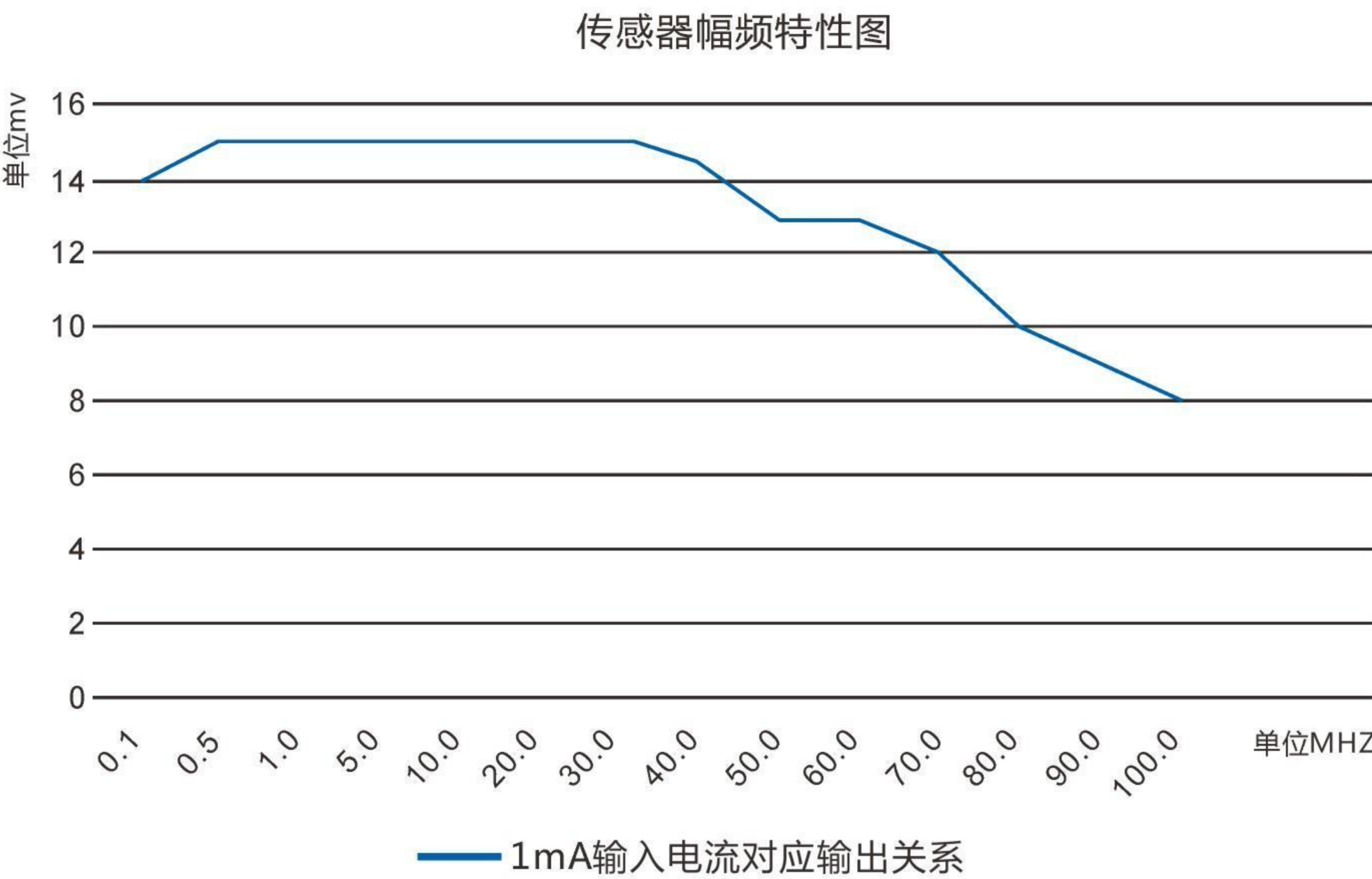
When partial discharge occurs inside the cable, the high-frequency current will propagate to the ground along the ground wire. A sensor is installed on the ground cable to detect high-frequency current signals for local discharge detection.

The circulation sensor uses the Roche coil working mode, and there is no electrical connection between the measurement loop of the sensor and the measured current, which belongs to the non-invasive detection method, and the equipment under test does not need to be shut down.

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> 传感器幅频特性图 Sensor amplitude-frequency characteristic diagram

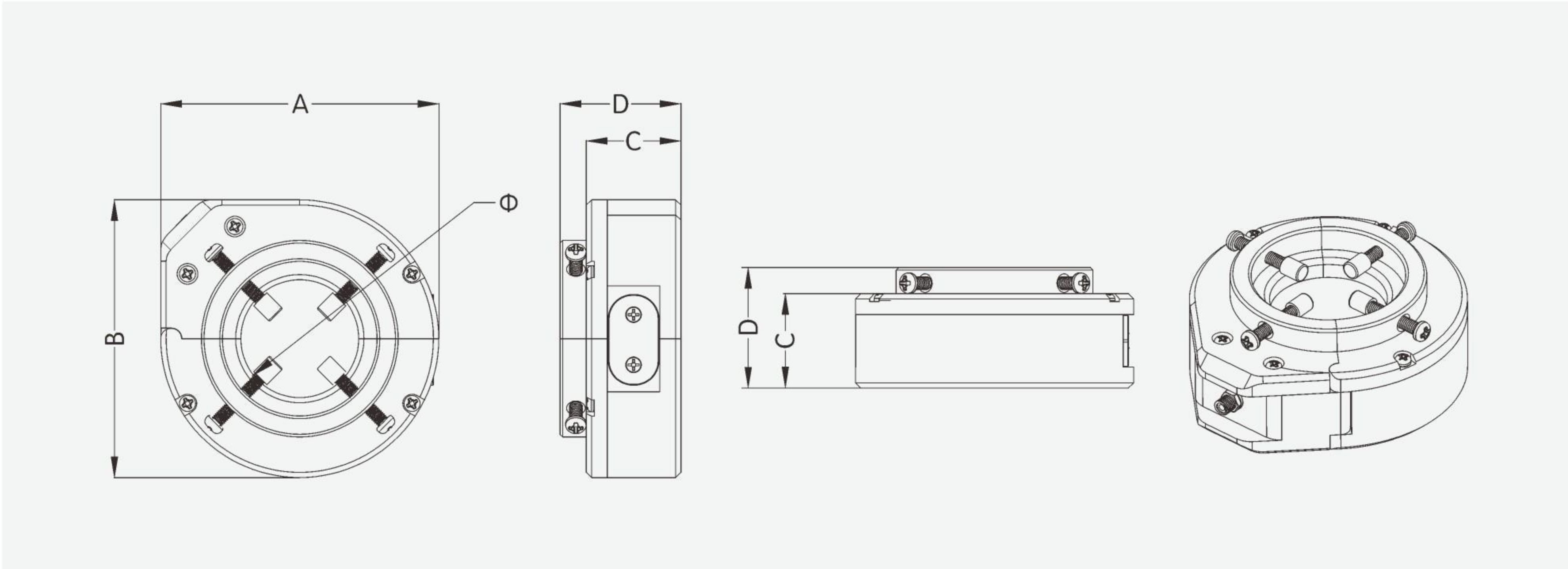


> 技术参数 Technology parameter

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> 外形及安装尺寸 Outline and installation dimensions

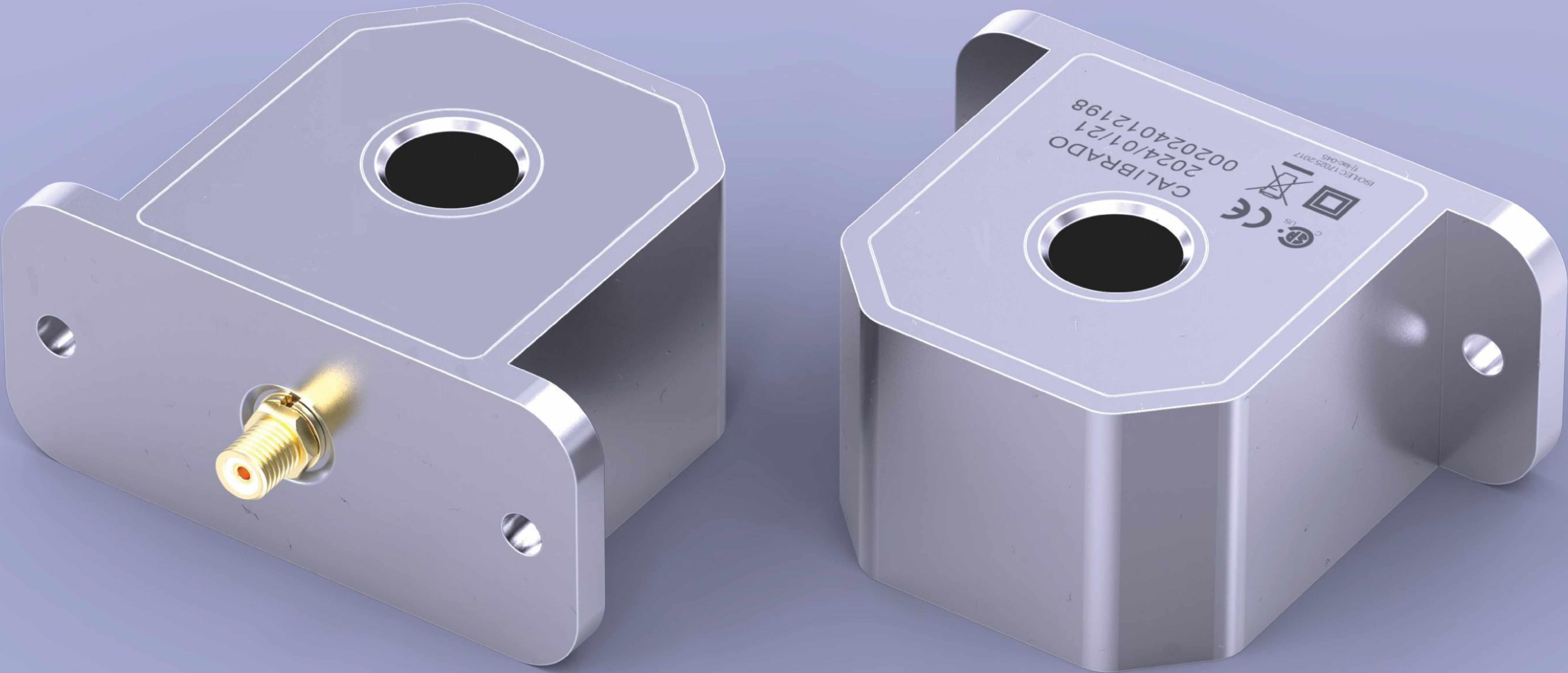
型号规格 Model and specification	外形尺寸 Dimensions(mm)				
	Φ	A	B	C	D
HFCT1-45	45	106	106	36	46
HFCT1-80	80	145	145	36	46
HFCT1-120	120	185	185	36	46



高频雷击电流传感器

HIGH FREQUENCY LIGHTNING CURRENT SENSOR

物联网电流传感器生产商
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LJCT 高频雷击电流传感器

HIGH FREQUENCY LIGHTNING CURRENT SENSOR

YUCHENG

> 产品概述 Product overview

高频电流传感器适用于当电缆内部发生局部放电时，高频电流会沿着接地线向大地传播。通过在地线上安装传感器，检测高频电流信号实现局放检测。

传感器使用罗氏线圈工作方式，在环状磁性材料上围绕多圈导电线圈，高频电流穿过磁芯中心而引起的高频交变电磁场会在线圈上产生感应电压。传感器的测量回路与被测电流之间没有电气联接，属于非侵入式检测法，被测设备不需要停运。

The high frequency current sensor is suitable for when partial discharge occurs inside the cable, the high frequency current will propagate to the ground along the ground wire. A sensor is installed on the ground cable to detect high-frequency current signals for local discharge detection.

The sensor uses Rothschild coil operation mode, which surrounds multiple coils of conductive coil on a ring magnetic material. The high-frequency alternating electromagnetic field caused by high frequency current passing through the center of the magnetic core will generate induced voltage on the coil. There is no electrical connection between the measurement loop of the sensor and the measured current, which is a non-invasive detection method, and the equipment under test does not need to be shut down.

> 产品特点 Product features

- ◆ 响应速度快，可达到ns 级别

◆ 频带宽，可在300KHz–30MHz范围内工作

◆ 线性度好，精度高

◆ 罗氏线圈工作原理，无二次开路危险

◆ 防水等级可达IP68，户内户外均可使用
- ◆ Fast response speed, can reach ns level

◆ Wide frequency band, can work in the range of 300KHz–30MHz

◆ Good linearity, high precision

◆ Rothschild coil working principle, no secondary open circuit danger

◆ Waterproof level up to IP68, indoor and outdoor can be used

> 技术参数 Technology parameter

产品型号 Product model	LJ-01
工作频率范围 Operating frequency range	0.3MHz–30MHz
灵敏度 Sensitivity	0.1pe
传输阻抗 Transmission impedance	18mv/mA
匹配阻抗 Matched impedance	50Ω
工作温度 Operating temperature	–40℃~+85℃
储存温度 Storage temperature	–40℃~+100℃
输出接口 Output interface	BNC或SMA
防护等级 Class of protection	IP68
孔径 Aperture	Φ60mm

> 外形及安装尺寸 Outline and installation dimensions

