

HF-WC-623

Ultrasonic Partial Discharge Tester



This portable Ultrasonic Partial Discharge Tester performs non-contact live detection on high-voltage power equipment. It collects ultrasonic signals to locate corona, arc and insulation defects, displays waveforms visibly, records test data with GPS, and delivers early fault alarms to improve substation inspection efficiency and avoid unexpected power outages.

Key features

- Portable structure with compact size and light weight for easy carrying; operable by a single person.
- Handheld non-contact live detection; visual waveform display plus audible sound output.
- Live scanning for outdoor substation equipment to detect and locate partial discharge phenomena including corona, electric arc, flashover, tracking discharge, wire breakage and drawing arc.
- Locates insulator discharge on transmission towers, creepage discharge of outdoor cable terminals, as well as partial discharge of underground cables.
- Detects leakage of sealed high-pressure gas and liquid.

Technical specifications

Parameter	Value
Circuit System	Anti-interference filtered analog circuit and digital circuit
CPU	Main frequency: 1 GHz
Memory	RAM: 2GB DDR3; Storage: 16GB eMMC
Display Screen	5.0-inch TFT LCD screen
Interfaces	TF card slot, USB Type-C, headphone jack
SD TF Card	TF card with capacity >= 8GB
Camera	5-megapixel HD camera
Attached Configurations	GPS, temperature & humidity sensor, high-brightness laser positioning
Storage Contents	GPS coordinates, time & date, temperature, humidity
Measuring Range	-7dBuV ~ 68dBuV
Frequency Range	20kHz ~ 150kHz
Resolution	1 dB
Measurement Error	±1 dB
Sensor Sensitivity	-65dB (0dB = 1volt/ubar rms SPL)
Sensor Center Frequency	40kHz
Operating Ambient Temperature	-25°C ~ 70°C
Sensor Diameter	16 mm
Relative Humidity	0 ~ 95%
Charger Specifications	Input: 100-240V, 50/60Hz Output: 20V, 3.25A
Power Supply	Powered by lithium battery: 14.8V / 2600mAh Continuous working time: More than 8 hours

Standard scope of supply

No.	Item	Qty	Notes
1	Main Unit of Ultrasonic Partial Discharge Tester	1 Set	HF-WC-623 Host
2	Ultrasonic Sensor Probe	1 Pc	Dedicated detection transducer
3	Type-C Charging Cable	1 Pc	For battery charging & data transmission
4	Power Charger	1 Pc	100-240V universal adapter
5	TF Memory Card	1 Pc	≥8GB, pre-installed system software
6	User Operation Manual (English + Chinese)	1 Book	Detailed operation & parameter guide
7	Calibration Certificate	1 Copy	Factory calibration document
8	Portable Shockproof Carrying Case	1 Pc	Hard shell suitcase for storage & transport
9	Green Laser Aiming Component Accessories	1 Set	Spare small fittings
10	Inspection Report	1 Copy	Factory test record before delivery

Compliance and documents

Applicable standards	[TO BE CONFIRMED] standard applied to this model
Calibration certificate	[TO BE CONFIRMED]
Optional accessories	[TO BE CONFIRMED]

Warranty and support

12-month warranty on every exported instrument. English operation manual and remote video guidance at commissioning. T/T, L/C at sight and deposit terms for bulk orders; sea, air or rail shipping.