

HF-CH-213

Cable Impedance Spectrum Analyzer



The Cable Impedance Spectrum Analyzer collects cable impedance data across various frequencies to generate spectrum curves. It effectively inspects insulation aging, joint deterioration, wire breaks and other hidden cable faults, delivering precise defect location for routine maintenance of high-voltage power cables.

Key features

- Enables non-destructive testing with long effective detection range and superior positioning accuracy, greatly cutting labor and maintenance costs.
- Ultra-fast testing speed: single test takes less than 1 minute, drastically boosting cable maintenance efficiency.
- Supports cable length measurement and intermediate joint fault locating; works perfectly for cables without original ledger data.
- Detects millimeter-level tiny defects caused by dampness, overheating, external force damage, chemical erosion, radiation, water trees and other factors.
- User-friendly operation: parameters adjustable for various working conditions; one-click completion of testing and positioning.

Technical specifications

Parameter	Value
Effective detection length	50 m ~ 100 km
Positioning error	<0.5%
Sweep frequency range	5 Hz ~ 20 MHz
Output signal-to-noise ratio	>80 dB
Detectable defect scale / Total weight	Millimeter level; <2 kg (including battery)
Output voltage / Battery capacity	DC 12 V; 8000 mAh
Operating temperature & humidity	-15°C ~ +50°C; <=80% RH
Dimensions	28.3 cm × 6.1 cm × 20.5 cm (smaller than A4 paper)
Continuous working time	More than 6 hours, supports fast charging
Architecture & System	ARM Cortex design with Linux kernel, stable performance for long-duration operation
Spectrum Display	Frequency-domain & time-domain data analysis, frequency-domain spectrum defect compensation
Defect Auxiliary Identification	Automatic defect position search and defect severity display via bar charts
Defect Annotation & Report Generation	Annotate defects on time-domain, frequency-domain and compensated spectra; mark cable terminals, intact joints and faulty cables; classify defects by type and severity; automatically generate formal test reports

Standard scope of supply

No.	Item	Qty	Notes
1	Main Test Unit	1 Set	Built-in rechargeable lithium battery
2	High-frequency Test Connecting Cables	2 Pcs	For cable wiring testing
3	Power Charger Adapter	1 Pcs	DC12V fast charging
4	User Operation Manual (English Version)	1 Book	Complete operation & parameter guide
5	Calibration Certificate	1 Copy	Factory calibration report

No.	Item	Qty	Notes
6	Portable Shockproof Carrying Case	1 Pcs	For storage & outdoor carrying
7	Accessories Pack	1 Set	Including terminal clamps, spare connectors
8	Test Report Template CD	1 Disc	Spectrum analysis software & report tool

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.