

HF-TC-625

SFRA Sweep Frequency Response Analyzer



The Sweep Frequency Response Analyzer generates standard frequency response fingerprints for power transformers. By comparing measured waveforms with original data, it pinpoints winding distortion, coil displacement and invisible internal damage, serving as essential testing gear for substation asset maintenance.

Key features

- Complies strictly with DL/T911-2016 Standard: Frequency Response Analysis Method for Power Transformer Winding Deformation
- All-in-one portable structure without cumbersome auxiliary parts; fast setup and simple operation for field inspections.
- Equipped with high-performance integrated MCU and advanced DDS direct digital frequency synthesis sweep technology.
- Dual-channel 16-bit high-speed synchronous AD sampling greatly accelerates testing efficiency.
- 8-inch adjustable-brightness resistive color touch screen for clear waveform viewing.

Technical specifications

Parameter	Value
Maximum Excitation Output Voltage	AC 20V peak-to-peak
Excitation Output Impedance	50 ohm
Sweep Frequency Accuracy	Class 0.01
Reference & Response Input Impedance	>1 Mohm
Max Response Input Voltage	AC 50V peak-to-peak
Max Reference Input Voltage	AC 20V peak-to-peak
Amplitude Measurement Range	-100dB ~ +20dB
Amplitude Measurement Resolution	0.1dB
Test Repeatability	99.9%
Operating Ambient Temperature	-10 °C ~ 70 °C
Operating Humidity	<= 90% RH (non-condensing)

Standard scope of supply

No.	Item	Qty	Notes
1	SFRA Analyzer Main Unit	1 Set	Complete host with built-in lithium battery, 8-inch touch screen
2	Excitation Test Lead Set	1 Set	Reference channel & response channel connecting cables
3	High Precision Test Clips	4 Pcs	Alligator clips for transformer winding connection
4	Wide Voltage AC Power Adapter	1 Pc	AC 100~240V, for charging and mains power supply
5	USB Flash Drive	1 Pc	Preloaded with upper computer analysis software
6	WiFi Antenna	1 Pc	For wireless data uploading & synchronization

No.	Item	Qty	Notes
7	English User Operation Manual	1 Copy	Detailed operation guide & parameter introduction
8	Factory Calibration Certificate & Test Report	1 Copy	Official certification for export & power industry acceptance
9	Shockproof Portable Aluminum Carry Case	1 Pc	Dustproof, anti-collision, convenient for outdoor field transportation

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.