

HF-ET-807

Transmission Line Parameter Analyzer



This high-voltage comprehensive tester integrates multiple testing functions to evaluate power-equipment insulation performance. Equipped with control panel and mobile casters, it supports on-site power-system inspection with stable output and convenient operation.

Key features

- Strong anti-interference capability. It performs accurate measurement when the ratio of heterofrequency signal to power-frequency interference signal reaches 1:10.
- Simple external wiring. Complete all line-parameter measurements with one-time connection to down-lead wires of tested line.
- High-precision measurement. Built-in near-power-frequency heterofrequency power source (47.5Hz & 52.5Hz) effectively separates field interference for high-accuracy small-signal measurement.
- Solves existing drawbacks of conventional test equipment such as complicated wiring, poor anti-interference performance, insufficient stability and low accuracy.
- Stores up to 2048 groups of test data. Data can be exported to upper-computer via USB port for data management and report generation.

Technical specifications

Parameter	Value
Power Supply	Three-phase AC380V $\pm$ 10%, 15A, 50Hz (RMS)
Max Output Voltage	Three-phase, 0-200V(RMS, $\leq$ 1%)
Max Output Current	5A
Output Frequency	47.5Hz, 52.5Hz ($\leq$ 0.1Hz)
Active Power	Power factor:0.1-1.0, $\pm$ 0.5% reading $\pm$ 1 digit47.5Hz, 52.5Hz ($\leq$ 0.1Hz)
Max Output Power	Three-phase 3 $\times$ 3kW (9kW)
Measurable Object	Two-phase lines, including HVDC transmission lines and electrified railway traction lines
Capacitance	0.1-30 μ F
Impedance	0.1-400 ohm
Impedance Angle	0 $^{\circ}$ -360 $^{\circ}$
Applicable Line Length	0.3km-400km for stable measurement
Capacitance	0.01 μ F
Impedance	0.01 ohm
Impedance Angle	0.01 $^{\circ}$
Capacitance	$\geq$ 1 μ F: $\pm$ 1% reading $\pm$ 0.01 μ F<1 μ F: $\pm$ 3% reading $\pm$ 0.01 μ F
Impedance	$\geq$ 1 ohm: $\pm$ 1% reading $\pm$ 0.01 ohm<1 ohm: $\pm$ 3% reading $\pm$ 0.01 Ω . Test condition: Current $\geq$ 0.1A
Impedance Angle	$\pm$ 0.3 $^{\circ}$ (Voltage $\geq$ 1.0V), $\pm$ 0.5 $^{\circ}$ (0.2V-1.0V)
Protection Functions	Over-current, over-voltage and earthing protection. Three-phase fuses fitted on panel. Protect instrument and operators under proper high-voltage test operation with reliable earthing connection. No instrument burnout risk.
Waveform Distortion Rate	Sine wave, distortion rate $\leq$ 2%

Parameter	Value
Insulation & Vibration Resistance	Insulation ResistancePower input terminal:>10 MΩ. Current output terminal:>10 MΩ. Voltage measuring terminal:>10 Mohm
Withstand Voltage	1.5kV, 1min, no flash-over. Passes 0.5m drop test for field transportation and lab test.
Anti-interference Parameter	Anti-interference current: >=50A when line terminals are short-circuited and earthed. Accurate measurement under signal-to-interference ratio 1:10. Supports two-phase line power-frequency parameter test.
Weight	Main unit: 65kg
Operating Environment	-15°C ~ 40°C; Relative Humidity <=90%
Overall Dimension	550×440×585 mm
Weight	61kg

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.