

D43E

Intelligent Cable Fault Location System



- Fully integrates a DC high-voltage generator, a high-voltage capacitor, an advanced multiple-pulse arc reflection unit (inductive type), and various signal acquisition functions into a single system;
- Motor-driven high-voltage switchgear technology eliminates the risk of errors from manual switching or manual wiring;
- Capable of conducting DC withstand voltage, burn-through, and fault breakdown tests up to 40kV;
- 32kV single-stage capacitor, with a maximum impact energy output of 2048 joules;
- Safety monitoring and protection for ground voltage and ground resistance;

Features and Technical Specifications

- A powerful, advanced portable cart-mounted intelligent fault location system that integrates a DC high-voltage generator, a high-voltage capacitor, an advanced active multiple-pulse arc reflection unit, and various signal acquisition functions;
- The patented low-voltage control technology for high-voltage switch assemblies enables motorized switching between multiple test modes. During testing, all high-voltage wiring changes are automated without manual intervention, completely eliminating the risk of errors from manual switching or manual wiring to ensure safety and reliability.
- Incorporates an advanced active multiple-pulse arc reflection filter, which extends arc stabilization time, makes it easier to detect breakdowns caused by moisture or water ingress faults, and produces clearer waveforms.
- Test Methods: Low-voltage pulse method, advanced active multiple-pulse arc reflection method, impulse current sampling/impulse location, DC current sampling, DC output, DC pulse output.
- Built-in high-voltage output terminals with high-voltage silicone coaxial cable for simple, safe, and reliable wiring.
- Wide wheels ensure stability, facilitating transportation and field operations.
- DC high-voltage output: 0–40kV negative polarity, maximum output current: 76mA
- Impulse Capacitor: 0–32 kV/4 μ F, with a maximum output energy of 2048 J;
- Built-in ball gap impulse discharge: Low-voltage controlled solenoid valve air gap, adjustable discharge cycle 3–12 seconds.
- Sheath testing and sheath fault location: 1:1–1:6 seconds.
- Protection:

Under any circumstances, pressing the " HV OFF " button activates a dedicated built-in safety mechanism to rapidly and automatically discharge residual charge from the impulse capacitor and the cable under test, ensuring safety.

Zero-voltage position protection: Prevents misoperation, safeguarding personnel and test specimens.

High-voltage limit: Automatically stops and discharges when exceeding the set maximum voltage;

Ground voltage and ground resistance safety detection protection;

