

# Cable Fault Locating system

## General information about AD -5300CF Cable Fault Locating system

GD2136H Cable Fault system is important tool to maintain all kinds of cables. It uses various detection way to test cable faults, which is suitable for different levels voltage power cables and communication cables.

### The system contains below units:

- ✓ AD-5301CF Impulse Generator
- ✓ AD-5302CF Cable Fault Locator
- ✓ AD-5303CF Cable Fault Tester
- ✓ Other accessories



## AD-5301CF Impulse Generator

It's used to generate HV impulse when using impulse flashover method to detect high impedance fault.

### Features:

Strong burning ability, max.burning power is 1000W, breakdown point can be burned in short time and the resistance of breakdown point is decreased. If working together with AD-5301CF Cable Fault Tester, there are two locating ways:

- a. Low voltage pulse: If only using AD-5301CF , open circuit and low impedance grounding faults of cable can be located, and the length of cable can be measured or wave speed of cable can be detected.
- b. High voltage flashover: The discharging pulse voltage waveform of fault point is sampled by discharging sphere gap, which can locate fault distance. Generate impulse of fixed frequency. If working together with AD-5301CF Cable Fault Locator, there are following functions:
  - a. Audio frequency: locate high impedance, flashover faults.
  - b. To pinpoint cable's route, identify special cable.
  - c. To metallic breakdown(dead grounding), using magnetic-field measurement to locate accurately. It also can be used in DC HV withstand test.

### AD-5302CF Cable Fault Locator:

Including transmitter, receiver, Inductive probe, potential type detection frame. It is suitable to test all kinds of power cable with metallic conductor. Its main function is locating poor insulation point, detecting circuit and depth of power cable.

### Features:

- High sensitivity
- Low static drift
- High accuracy of locating
- Anti-interference
- LCD screen to show signal and status
- Built-in rechargeable Li-battery.

### AD-5303CF Cable Fault Detector:

It can test faults of short circuit, grounding, high impedance leakage, high impedance flashover fault and cable's poor connection, disconnection for all kinds of power cables (voltage degree 1kV-35kV) , local cable, communication cable, coaxial-cable and metal overhead line. It also can measure cable's length and propagation speed of electric wave speed on the cable.



### Features:

Safe, prompt and accurate testing. It uses LV impulse method and HV flashover detection, which test all kinds of cable faults.

Using high speed data sampling technology. A/D sampling speed is 100Mhz.

Wave form and data automatically display on big LCD screen.

Wave form and parameter storage function.

Function of comparing testing waveform of cable fault with normal waveform.

Wave form extending function.

## Technical Specification of the device:

### AD-5301CF Specification:

- Input power supply: AC 220V,50Hz
- Output voltage: DC 0-32kV (adjustable)
- Rated power: 2Kva
- Max.energy: 2048J, 4uF
- DC flashover voltage: 32kV
- DC flashover current: 63mA
- Max.impulse current: 500mA
- Discharging method: DC HV, one time, cycle
- Cycle discharging time: 3-6 seconds
- Environmental temperature:0-40°C
- Humidity:<75% RH
- Altitude:<1000m
- Insulation level: A
- Dimension: 430\*540\*410mm
- Weight:about 31kg.

### AD-5302CF Specification:

- Tracing and locating distance: local cable 3km, other cable up to 20km
- Fault impedance resistance:0-5MΩ
- Locating accuracy:  $\leq \pm 10$ cm.
- Detection cable depth: <3m

### AD-5303CF Specification:

- Max.testing distance: 15km(Open wire up to 100km) according to customer's requirements.
- Blind detection: 1m
- Resolution: 1m
- Power consumption: 5VA
- Environmental temperature: 0-40°C(limit temperature:-10°C-50°C)
- Relative humidity: 40°C ( 20~90) %RH
- Atmospheric pressure: 86-106Kpa
- Size: 275\*220\*160mm
- Weight: 1.8kg

