kynetech

Transmission Line Distributed Fault Location Device K8070

A distributed fault location system for HV/EHV transmission lines. Using high-frequency traveling wave sampling and distributed terminals, it captures fault signals accurately. Combined with edge computing, it delivers precise positioning and identification to shorten power outage time.



Product Core Positioning

An integrated fault location solution for HV/EHV lines, multi-circuit towers and lightning-prone areas. High-precision positioning enables fast fault isolation without manual line inspection, reducing O&M costs and improving grid reliability.

Core Technical Advantages

◎ Accurate Fault Location

Distributed multi-point synchronous sampling + traveling wave time difference method. Positioning accuracy ≤300m (±1 tower), fault trip alarm ≤5min, section positioning accuracy ≥95%.

◎ Intelligent Fault Identification

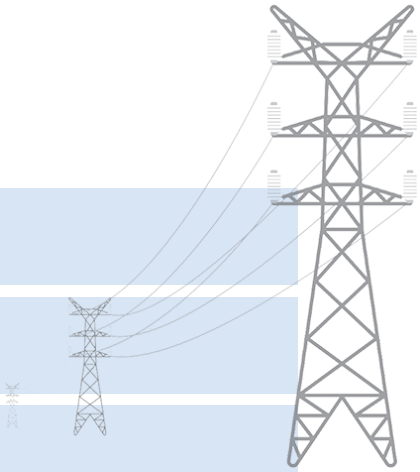
AI algorithm automatically distinguishes lightning/non-lightning, shielding/back striking faults. Supports phase judgment for multi-circuit lines on the same tower, identification accuracy ≥95%.

◎ High-precision Timing & Acquisition

Beidou high-precision timing, synchronization error ≤0.1μs; full-dimensional collection of power frequency/traveling wave current, local storage ≥90 days, data traceable.

◎ Stable Power Supply & Protection

Induction power collection + solar hybrid power supply, IP65 protection, -25℃~+70℃ wide temperature operation, intelligent self-inspection + automatic reset, long-term stable and reliable.



Core Function Introduction

01 Accurate Fault Location:
Traveling wave time difference positioning, error ≤300m, alarm ≤5min

02 Intelligent Fault Identification:
Distinguish lightning/non-lightning, shielding/back striking, accuracy ≥95%

03 All-round Data Collection:
Beidou timing ≤0.1μs, real-time current waveform collection & storage

04 Reliable Data Transmission:
Wireless real-time upload, retransmission after network disconnection

05 Remote Intelligent O&M:
Remote parameter configuration & firmware upgrade, reduce O&M cost

Product Technical Parameters

Parameter category	Specific parameters
Timing Synchronization Error	≤0.1μs
Fault Location Accuracy	≤300m
Positioning Correct Rate	≥95%
Protection Grade	IP65
Operating Temperature	-25℃～+70℃
Power Supply	Induction + Solar
Data Storage	≥90 days
Unit Weight	≤5kg

Application Scenarios & Benefits

Suitable for HV/EHV transmission lines, multi-circuit lines on the same tower, mountainous/coastal/heavy lightning areas; quickly locate faults, reduce power outage time, lower inspection costs, and improve grid safety and stability.