



## Product Description

### [Smart Fault Indicator (SFI) (1) MODEL]

SFI (1) MODEL detects faults on a distribution line showing white and red LED flashing, also, is remotely controlled via mobile phone or computer.

#### 1. General Scope

EMT Smart Fault Indicator (SFI) (1) MODEL is a useful and reliable electrical equipment to find out fault location on the overhead distribution lines.

It shall make LED flashing in visible when it detects fault current on the downstream distribution line. It sends fault trigger message immediately to the registered mobile phones and can be monitored by computer. Its fault location of distribution line is quickly recognized and helps dispatch center to recover power outage.

#### 2. General Specification

Rating Voltage 3 ~ 75 kV

Rating Current up to 1000 A

Rating Frequency 50 / 60 Hz

Fault Detection Phase to phase fault

Phase to earthing fault

Fault Current Pick-up Automatic set of fault triggering algorithm

Different Flashing Indication between Transient and Permanent Fault White LED Flashing (Transient Fault)

Red LED Flashing (Permanent Fault)

\* White LED Short Interval Flickering for Reclosing Progressing

Flashing Indication Signal Time ½, 1, 2, 4, 8, (16) hour(s)

Low Battery Indication Green LED signal

#### 3. Smart FI Function

1) Inrush restrain specific algorithm integrated

2) Indication test function for transient fault, permanent fault, and reset signal

\* Fault triggering signal test probe : 1 each provided every 50 FI (or 20 sets of SFI (1) MODEL)

3) Live line mounting and dismounting on hot line by hot stick

\* Installation hot stick (optional)

4) Self power charging device : DC 3.7 v

5) Automatic & manual reset function

#### 4. Smart Fault Indicator Operation Schematic Diagram

\* In case of transient fault (within 3 minutes) at "A" point :  
SFI shall be flashing LED (white color) during the set time

\* In case of permanent fault (over 3 minutes) at "B" point :

SFI shall be flashing LED (red color) shall be flashing during set time, and immediately stopped when the live voltage is recharged.

## **5. SFI (1) MODEL - model selection & system device**

1) Components – 3 SFI units + 1 RSU (Receiving & Sending Unit) (recommended)

\* Installation hot stick (optional)

\* Solar charging device (optional)

\* Backstage software in dispatch center for SFI (1) MODEL (optional)

2) Function : Remote monitoring of fault trigger signal via mobile phones or computer in GSM network

3) 1set of RSU covers 6 units of SFI (1) MODEL in 20 ~100m RF range

## **6. RSU Configuration**

1) GSM auto intelligent fault trigger - signal sending module

2) External fault signal flashing lamp

3) Rechargeable battery : DC12V (or DC 24V)

4) External battery charger : AC 220V / DC12 (24)V - external power supply ( P.T, or solar charging device)

5) Panel enclosure box : Poly box, or metal box

6) Smart fault indicator system configuration

7) Typical Smart Fault Indicator System Installation