

# **DFE-HH Catalogue**

**Overhead Line Remote Fault Indicator**

**For Reliable, Secure and Economical Energy System Operation**

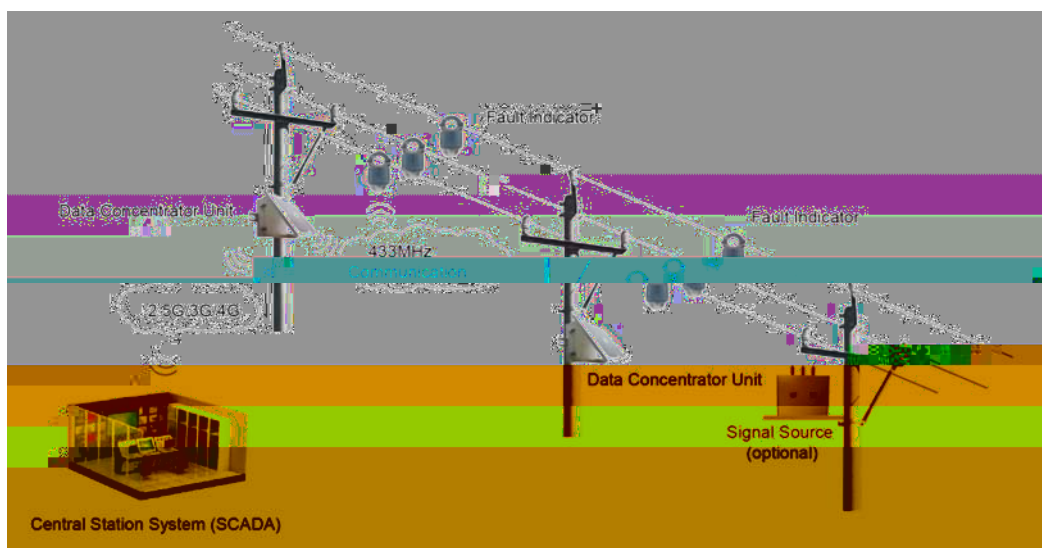
# 1. General Description

DFE-HH Overhead Line Remote Fault Indicator is usually used in 5~150KV overhead line power distribution network to monitor and detect short-circuit and earth fault. The fault signal is indicated by three ultra-bright blinking LEDs with 360° sight. The fault information and current value can also be uploaded to the SCADA by 2.5G/3G/4G/5G networks.

The indicator can be mounted under live conditions with the help of an adapter and a hot stick. The parameters such as trip current, reset time, blinking interval, etc., can be read and adjusted by a bidirectional wireless tool. Permanent fault, transient fault and battery low voltage alarm can be distinguished and indicated separately by 3 different ultra-bright blinking LEDs. And the earth-fault can be indicated by two alternating different ultra-bright blinking LEDs.

The earth-fault and short-circuit fault indicator type DFE-HH consists of:

- 1) 1 pcs DCU: Transmit fault and load current value to SCADA
- 2) 3 pcs indicators: short-circuit and earth fault detection and indication





## 2. Features

Permanent Fault:	Red ultra-bright blinking LED.
Transient Fault:	Green ultra-bright blinking LED.
Earth-fault:	Red and green ultra-bright LEDs blinking alternately.
Low Battery Warning:	Yellow ultra-bright blinking LED.
Parameter Adjust:	The parameters can be read and adjusted by bidirectional wireless tool.
Remote Transmission:	DCU can transmit data to SCADA system.
Power Supply:	The indicator can take power from overhead lines, with lithium battery as backup. The DCU can take power from solar energy with lithium battery backup.

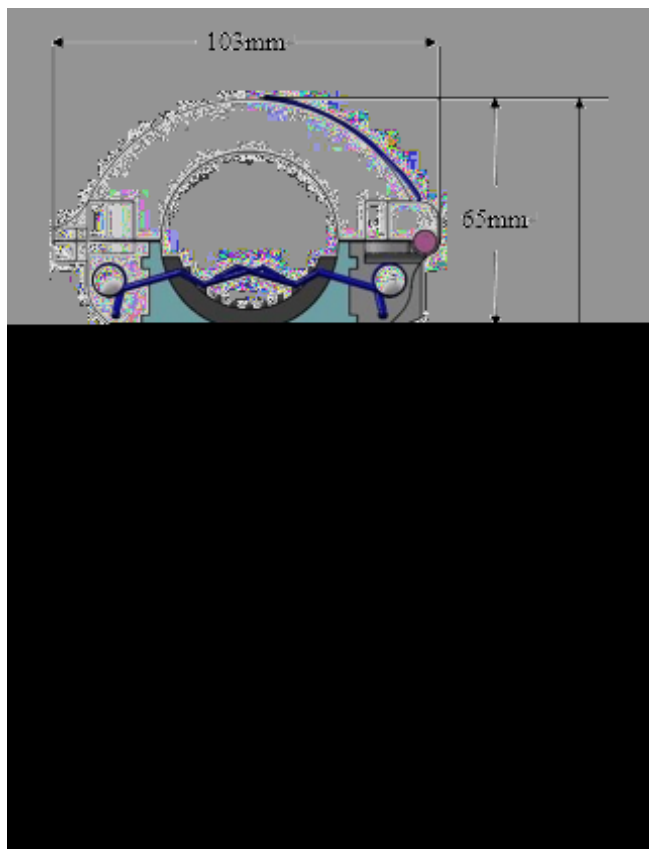
## 3. Specifications

Subject	Value
Short-circuit Trip Current (Phase to Phase)	50~1200A adjustable, 1A step, 150A default
Earth-fault Voltage Drop (Phase to Ground)	Adjustable: 1% step, 30% default
Earth-fault Response Delay	Adjustable: 1 second step, 30s default
Indication Unit Reset	<ol style="list-style-type: none"> <li>1. manual by magnet</li> <li>2. remote reset through SCADA system</li> <li>3. time reset: adjustable, 1 second step, 24h default, max. 48h</li> <li>4. Auto delay reset after repower, 1 second step, 30s default max 5min, only for permanent fault</li> </ol>
Protection Class	IP68
Internal Type Test	According to IEEE495-2007
Operation Temperature Range	-40~+85 J 5 Â s q



Accuracy	0A~300A $\pm$ 3A 300A~800A $\pm$ 1%
Cable Diameter Ranges	6mm~42mm
Blinking Frequency	10 per minute, adjustable
Max. load/fault Current	1200A
Voltage Range	5~38KV, can be customized to 44KV, 69KV, 110KV and 115KV
Current Withstand	31.5KA/4s
Communication	433MHz from indicators to DCU 2.5G/3G/4G from DCU to SCADA
Communication Protocol	Indicator to DCU: private DCU to SCADA: IEC101, IEC104, DNP3.0, Modbus

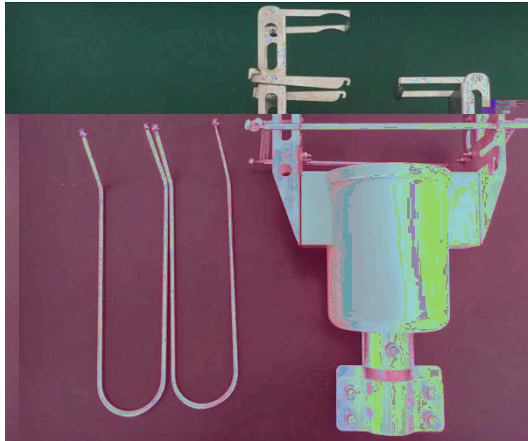
## 4. Dimensions



## 5. Accessories

### 5.1 Installation Adapter for Fault Indicator

*\*Please refer to User's Manual to get the way the installation.*



*indicator parameters, do some configuration or reset indicator on site.*

*\*Please refer to FPI-HAND User's Manual.*



### 5.2 FPI-HAND Fault Indicator Configuration Tool (Optional)

*\*Easy for maintenance crew to check fault*

## 6. Order Info

Item	Content
Type	Local type(3 pcs indicators)    Remote type(3 pcs indicators+1 DCU)
Parameter	Voltage level:    KV, Frequency:    Hz SIM card quantities: 1 /2
Accessories	DCU: Solar panel    Battery    Housing    DC adapter

Dongfang Electronics International Engineering Co., Ltd.

Dongfang Electronics Co., Ltd.

Address: 2 Jichang Road, Yantai, Shandong Province, P.R. China, 264000

Tel: +86-535-5520932

Fax: +86-535-5520930

Email: [idf@dongfang-china.com](mailto:idf@dongfang-china.com)

Website: <http://www.dongfang-china.com/en>



THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF DONGFANG ELECTRONICS INTERNATIONAL ENGINEERING CO., LTD. ALL RIGHTS RESERVED.