Remote Overhead Line Fault Indicator

Four-Faith 让万物更加智慧
Bringing Intelligence Across All Beings

JYZ-HW Datasheet

JYZ-HW Overhead Line Remote Fault Indicators is usually used in 5~38KV (can be customized by 44KV, 69KV and 110KV) 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 360º sight. The fault information and current value can also be uploaded to the SCADA by 2.5G/3G/4G 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 JYZ-HW consists of:

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

Topology
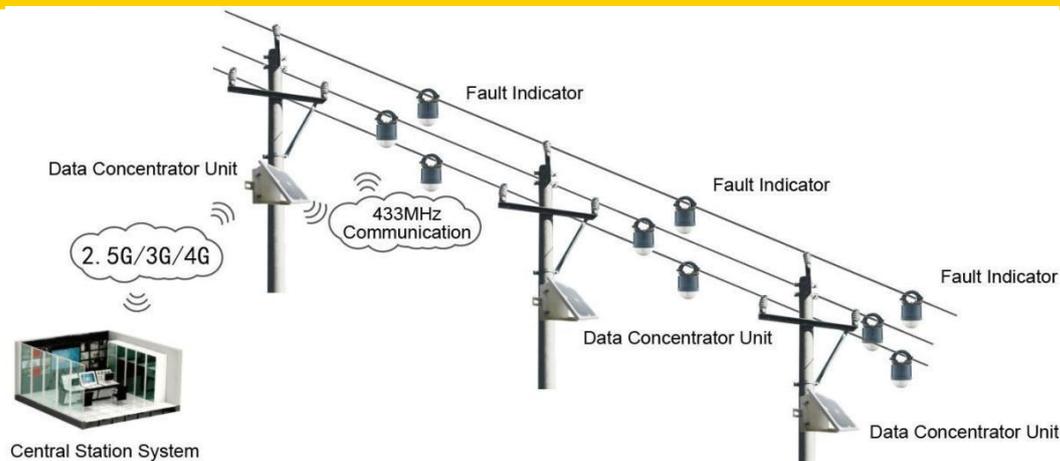
Features

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.

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	1. manual by magnet. 2. remote reset through SCADA system 3. time reset: adjustable, 1 second step, 24h default, max. 48h 4. Auto delay reset after repower, 1 second step, 30s default max 5min, only for permanent fault
Protection Class	IP68
Internal Type Test	According to IEEE495-2007
Operation Temperature Range	-40~+70℃
Power Supply	Lithium battery type AA 3.6V / 9Ah, replaceable
Battery Life	Approx. 10 years
Indicator weight	approx. 590g
DCU weight	approx. 3.6Kg
Dimensions	Diameter: 93mm Height: 170mm
Accuracy	0A~300A ±3A 300A~800A ±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 and 110KV
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
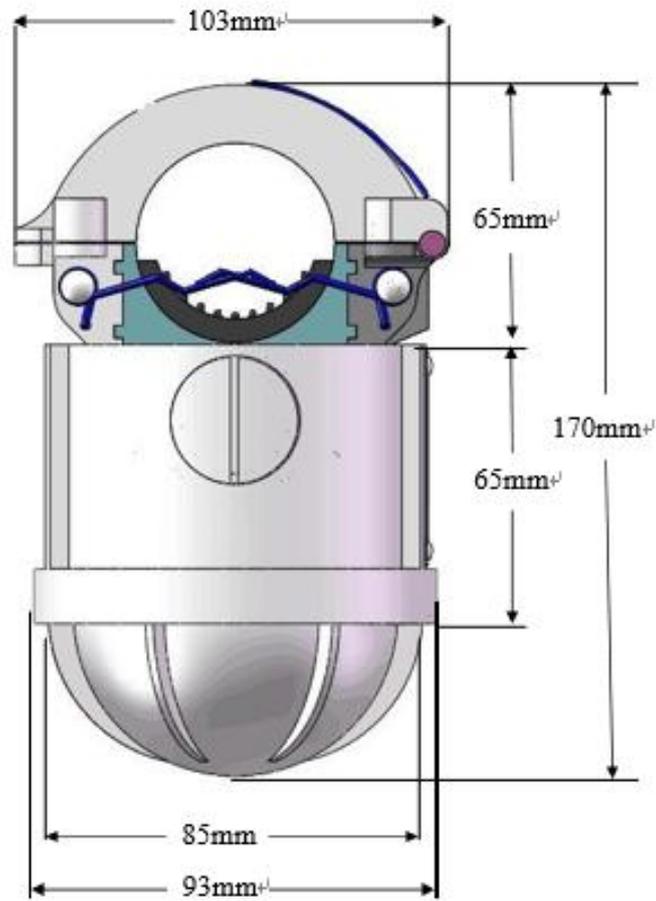
Item	Content	
Type	Local type(3 pcs indicators)☐	Remote type(3 pcs indicators+1 DCU)☐
Parameter	Voltage level:　　KV, Frequency:　　Hz SIM card quantities: 1☐/2☐	
Accessories	DCU: Solar panel☐　　Battery☐　　Housing☐　　DC adapter☐	