GUORUI

Service Hotline **400-101-5915**

GIM Rim insulation monitoring system

▶ **Overview**

GIM is used for monitoring the insulation resistors of the IT power grid. When the low insulation fault occurs, the system can find out the fault branch to help maintain the power system.

GIM is consist of Insulation monitor, Insulation fault location module, and Current sensor.

Insulation monitor is used for monitoring the insulation resistors of the IT power grid. When the value is lower than set, it starts sending the detective signal.

The Insulation fault location module collect the leak current of the current sensor installed in the branch of the power grid, to judge which branch has the fault.

The current sensor needs to be crossed by ABC three-phase wires at the same time. When there is no insulation fault, the vector sum of three-phase current is zero, and the CT can not collect any signal; When the fault occurs, the detective signal will flow from the branch to the earth, and the CT can sense the signal and judge the fault branch.

The Insulation monitor can show the fault branch on screen, and send the information to the host by Rs485.

▶ **Product features**

■ Low insulation fault monitoring function;

■ Fault branch location function;

■ Interface interaction function;

■ RS485 communication;

■ Two digital output;

■ Measuring function of voltage, frequency, insulation resistance and leakage capacitance of system.

▶ **Product composition**

GIM is consist of Insulation monitor, Insulation fault location module, and Current sensor.

Usually, each power system is equipped with an insulation monitor. Each insulation monitor can communication up to 32 insulation fault location modules using CAN bus. Each insulation fault location modules can receive signals up to 8 CTs, which means can monitoring 8 branches of power distributions. So the max branches the GIM system can monitoring is 256.

If multiple hosts are connected in parallel, the system can be expanded to accommodate up to 2048 branches.

▶ **Technical index**

■ Applicable system：≤690VAC,≤1000VDC system

■ Working voltage: DC24V +/-20%

■ Communication: Rs485

■ Output: two passive contact output

■ Input: two active contact input

■ Measuring range: 0~10M

■ Alarm seet range：10K~1MΩ；10K~400KΩ

■ Measuring accuracy: 0~100kΩ less than ±10kΩ。
100~1MΩ less than±10%

■ Ambient temperature:-25℃~70℃

▶ **Dimensions**

■ Insulation monitor
158mm x 116mm x 103mm

■ Insulation fault location module
158mm x 35mm x 100mm

■ Current sensor

Type	Model	Dimensions
circle	GIM-CT45	45mm(Inner diameter)
	GIM-CT100	100mm(Inner diameter)
	GIM-CT150	150mm(Inner diameter)
	GIM-CT200	200mm(Inner diameter)
integrated type	GIM-ZCTI-125	92mm x 70mm x 69mm
	GIM-ZCTI-250	105mm x 70mm x 72mm
	GIM-ZCTI-400	142mm x 101mm x 92mm

▶ **Model naming**

■ Insulation monitor

Model	RIM series	GIM	-M11
Design code			

■ Insulation fault location module

Model	RIM series	GIM	-S1
Design code			

■ Current sensor

Model	CT series	CT	-□
Design code			
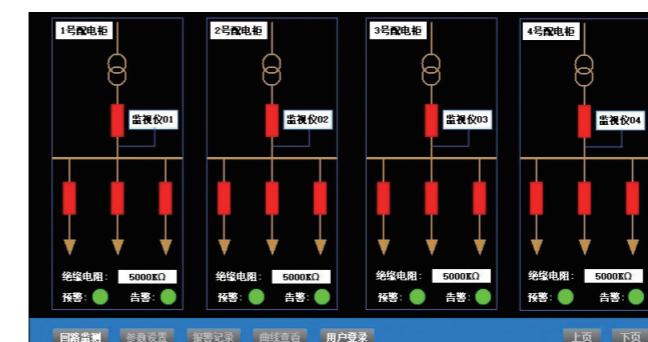
▶ **System Configuration Diagram**