

Smart lightning strikes counter TDZ-LJQ



Description

With the increasing automation of electronic and electrical systems, electromagnetic pulse interference (such as lightning strikes) can easily cause equipment damage. It is difficult to detect the failure of traditional surge protectors (SPDs) in time, which poses a safety hazard.

This product can monitor the SPD status in real time, including operating conditions, switch status, lightning strike records (number of times, time), etc., and save alarm and lightning strike data. Combined with special software and hardware (such as dynamic ring RTU), an intelligent lightning protection monitoring system can be built to achieve remote data upload and centralized monitoring. It is suitable for decentralized places such as railways, wind power, and airports, effectively reducing protection blind spots and improving equipment safety.

Feature

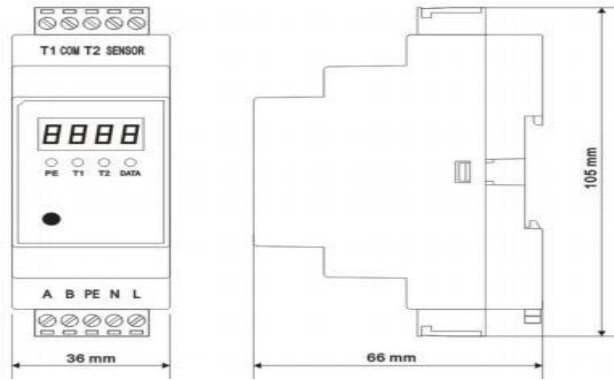
1. Small size: This product is a rail-mounted instrument that can be easily integrated into lightning protection boxes, lightning protection cabinets, distribution boxes, distribution cabinets, and network cabinets without changing the original product dimensions and layout.
2. Easy to install: All interfaces are plug-in terminals, which can be quickly installed and maintained.
3. Interface types: SPD/SCB remote signal collection, NTC temperature (multiplexing port, when this function is selected, one remote signal port will be missing), PE access status collection, lightning strike counting, ambient temperature and humidity functions, etc.
4. Support local button modification of instrument RS485 address.
5. Communication method: The product is equipped with RS485 interface as standard, which is convenient for data upload and cascade expansion; other communication methods such as Ethernet, Lora, and 4G can also be realized through expansion.
6. Strong anti-interference ability: The serial port is equipped with surge protection circuit, and the acquisition port is designed with photoelectric isolation circuit to ensure that the product is not interfered by surge and electromagnetic waves to the greatest extent.



Technical data

Item name		Description		
Model		TDZ-LJQ		
Power supply		220VAC±10%		
power consumption		2W		
Communication	RS485	Terminal block, standard MODBUS RTU protocol		
		Baud rate 1200/2400/4800/9600/19200 optional, default 9600; check bit N; data bit 8; stop bit 1		
		Device address 1~255 optional, default 1		
Data acquisition port	T01 Multiplexing port	temperature acquisition（option）	Wiring terminal, NTC sensor; anti-shake function to avoid false alarm or frequent alarm	Function: Real-time monitoring of the surface temperature of the lightning arrester (-30℃～160℃). Alarm: When the set high/low temperature limit is exceeded, the T1 port alarm is triggered and the LED indicator is lit. Record: Store 65,535 alarm records. Save detailed data of the last 10 alarms (time, date and extreme temperature value). Adjustable parameters: Support custom high/low temperature alarm thresholds
		Switching data acquisition (Default)	Wiring terminal, photoelectric isolation, passive dry contact access; anti-shake function to avoid false alarm or frequent alarm	Function: Monitor the remote signal of the lightning arrester or the switch status of the backup protector (closed = alarm, open = normal). Alarm: Light up the LED indicator when triggered. Record: Store 65,535 alarm records. Save the port number, time and date of the last 10 alarms
	T02	Switching data acquisition (Default)		
	Single use			
	PE status	Check the grounding status of the PE line Indicator light: On: Grounded		
Temperature and humidity data acquisition		Temperature	-40～85℃	
		Humidity	0～100% RH	
Lightning surge data acquisition		Couner function	Can record more than 650 million times; can record the date and time of the latest 9999 surges	
		Trigger current=	200A～100kA	
		Surge protection type	T1/T2/T3	
		Surge type	Inductor Coil	
Power-off data retention		Alarm data is permanently retained after power failure; clock data is retained for more than half a year after power failure		
Firmware Upgrade		Remote firmware upgrade via serial port		
Material/Color		PC+ABS, white, UL94 V-0		
Moutning		35 mm DIN-rail mounted		
Enviroment		-40～85℃, 0～95% RH		

Dimension



Wire diagram

