



GDJB-61850 Optical Digital Relay Protection Test System



Product Description

GDJB-61850 Optical Digital Relay Protection Test System adopts embedded real-time operating system vxWorks, high performance PowerPC, large-scale FPGA and other technologies, combines with field condition of the electric power and the experience from many power users, and then independently researched and developed this new portable product. GDJB-61850 provides complete testing plan for digital protection & automation device and instrument under IEC61850, IEC60044 standard protocol system, it is widely used in smart substation, Electrical Power Research Institute, original equipment manufacture and other R&D institution.

Features

- Sending, receiving and powerful computational analysis ability of multiple messages.
- Perfect engineering test management plan.
- Special automatic test template.
- Standard, open test model and interface.
- Support for multiple cascading tests.

Specifications

Power supply	AC 220V, allowable variation: -20%~15%; frequency: 50Hz, allowable variation: -4%~2%; waveform: sine wave, distortion factor≤5%;	
	DC 110V/220V, allowable variation: -20%~15%; ripple coefficient<5%;	
	Ethernet communication	Model: 10/100Base-Tx;
		Port: 2 pcs;
		Interface type: RJ45;
	Fiber optic Ethernet	Model: 100Base-FX/1000Base-FX;
		Port: 8 pair;
		Interface type : LC;
		Adopted standard: IEC60044-7/8;

Interface	FT3 optical fiber serial port	Port: 6pcs for sending,1pcs for receiving;
		Interface type : ST;
	Synchronous interface	Interface type : ST;
		Timing deviation: < $\pm 1\mu\text{s}$;
Cascading synchronization interface	Port: 1-way for B code,1-way for RS485 (adaptive master slave mode, can input, output);	
	Interface type: phoenix terminal;	
Binary output contact	Quantity: 4 pair;	
	Type: idle contact;	
	Output capacity: 250V(AC/DC)/0.5A;	
	Relay actuation time: < 3ms;	
	Quantity: 8 pair;	
	Type: 20~250V(DC) or idle contact;	
	Sampling frequency: 10kHz;	
	Time resolution: 100 μs ;	

Binary input contact	Anti-jitter time: 0~25ms;
	Timing error: $\pm 0.1\text{ms}$ (0.001s~1s), $\pm 0.01\%$ (1s~1.5x10 ⁵ s);
	Max.timing: 1.5x10 ⁵ s;
Analog small signal input:	Channel:12;
	Voltage range: $\pm 10\text{V}$;
	Voltage accuracy: 0.1%;
	Max.current: 1mA;
	Allowable input frequency: sine signal 10~250Hz, transient signal DC~10.0kHz;
	Frequency accuracy: 1mHz;
	Frequency resolution: 0.001Hz;
	Phase accuracy: < 0.1°;
	Status indication: green light means there have signal output;
	Interface type: phoenix terminal;
	Channel:12;
	Voltage range: $\pm 10\text{V}$;
	Voltage accuracy: 0.1%;

Analog small signal output	Max.current: 1mA;
	Allowable input frequency: sine signal 10~250Hz, transient signal DC~10.0kHz;
	Frequency accuracy: 0.002%(1mHz under power frequency);
	Frequency resolution: 0.001Hz;
	Phase: phase angle range 0~359.9°, accuracy < 0.1°, resolution ±0.01°(50/60Hz);
	Interface type: phoenix terminal;
Size	(W×H×D) : 256mm×182mm×365mm;
Weight	5kg;