

POM2-3333

Digital Relay and Merging Unit Tester

Test different types of MU in electronic transformer input, magnetic transformer input and electromagnetic transformer input, integrate with reliable analog output and high-speed digital signal process. Support GPS, IRIG-B and PPS timing method, 0.05% high accuracy analog output and strong abnormal SMV function.

POM2-3333 can also test SMV accuracy, data process delay, clock synchronization, time accuracy, abnormal SMV and SMV time dispersion, etc items.



Functions:

- Background software can do programming of the electrical wiring graph and configuration and fault simulation of protection relays, analog the setting of specifications of MU, digital terminal devices and specifications setting of fault and fault points. The entire testing and operation process can be controlled by the background software.
- Two kinds of test modes ensure absolute time delay parameters of MU and complete the SMV response time test accurately.
- The timing function makes tests on MU's clock synchronization and time accuracy, etc time characteristics.
- SMV analysis analyzes SMV and GOOSE messages output by MU in real-time.
- It tests the MU's self-checking and fault process by SMV quality bit, signal remark in GOOSE or the defined warning information in GOOSE.
- The electric quantity in SMV can display the wave, binary status and previous displacement time.
- The SMV and GOOSE abnormal output by MU can be judged and analyzed by multi abnormal SMV detection systems.
- The accurate timing remark on SMV can statistic and evaluate the time dispersion of MU's SMV.





Technical Parameters

Current Amplifier	
Setting	Each phase outputs current amplitude. The frequency and phase are independent to be adjusted.
Amplitude	6x12.5A/phase, or 3x25A/phase, or 1x60A (6 phases in parallel)
Accuracy	±0.05%
Pmax	≥160VA/phase(3×25A/phase) ≥80VA/phase(6×12.5A/phase)
THD%	≤0.05%
Amplitude-frequency characteristic	amplitude-frequency change

Voltage Amplifier	
Setting	Each phase outputs voltage amplitude. The frequency and phase are independent to be adjusted
Amplitude	6×120V/phase
Accuracy	±0.05%
Pmax	≥60VA/phase, 3×120V/phase ≥30VA/phase, 6×120V/phase
Amplitude-frequency characteristic	amplitude-frequency change
Current/ voltage synchronization error	≤10μs

Frequency	
Sinusoidal signal	1 ~ 1kHz
Output characteristic	superposition any amplitude (less than rated value) of harmonics among 2-20th and DC

Phase	
Phase angle range	0-359.9°
Accuracy	±0.05°

DC output	
Amplitude	6×0A ~ 6.25A, or 3×0A ~ 12.5A
Accuracy	±0.5%
Pmax	125W (12.5A, 10V)

Auxiliary DC voltage output:	
Amplitude	1x300V/phase
Accuracy	0.5%
Pmax	88W (110V), 110W (220V) 110W (300V)

Low level analog output	
Output channel	12 channels
Setting range	AC: 0-7Vrms
Accuracy	<0.05%
Amplitude-frequency characteristic	Amplitude-frequency change ≤ ±0.1% ~ 0.5% (1Hz ~ 1kHz)

IEC61850 Port	
IEC61850-9-1/2/2LE	LC port, 6 pairs

IEC60044 Port	
IEC60044-7/8 Send	4 ST ports
IEC60044-7/8 Receive	1 ST port

Synchronization	
GPS port	built-in chip with external GPS antenna
IRIG-B send	1 ST port
IRIG-B receive	1 ST port
Synchronous pulse receive	1 ST port

Binary input	
Number	8 pairs
Binary characteristic	With adjustable threshold or potential free

Binary output	
Number	4 pairs
Type	potential free relay contacts
Capacity (AC/DC)	Vmax: 250V/Imax:0.5A

Screen and mouse	
Screen:	10.4 inches, resolution: 1024x768
Mouse:	Laser positioning

Dimension and weight	
390 mm×210 mm×287mm - (W×H×D) 14kg	

