

Combination Wave Surge Immunity Test Simulator

CWS

Datasheet

1000CM, CWS 1000MM



In Compliance with

- > IEC 61000-4-5
- > IEC 61643-1
- > GB/T 17626.5
- > GB/T 16927.1
- > ITU-T K.21
- > ITU-T K.44

Introduction

CWS 1000CM/MM is designed to perform combination wave surge immunity tests according to IEC 61000-4-5, capable of generating waveforms of 1.2/50 μ s, 8/20 μ s, 10/700 μ s, 5/320 μ s, connected to EUT via external CDN. The equipment meets the relevant requirements of CE, CCC etc.

Features

- > 5.7" color touch screen front panel
- > Mini size, high capacity (up to 10 kV)
- > Capable of generating 1.2/50 μ s, 8/20 μ s, 10/700 μ s, 5/320 μ s waveforms as per IEC 61000-4-5
- > LCD display of surge voltage and current monitoring
- > Easy to operate with test sequencing and scheduling
- > External automatic coupling / decoupling network

Application Areas

> IT > Military

> Telecom > Avionics

> Medical > New energy

> TV broadcasting > New energy automotive

> Railway

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Technical Parameters-1.2/50 μs, 8/20 μs				
Test Voltage	0.5 kV -10.0 kV ± 10%			
Voltage Tr	1.2 μs ± 30%			
Voltage Td	50 μs ± 20%			
Test Current	0.25 kA - 5.0 kA± 10% (2 ohm)			
Current Tr	8 μs ± 20%			
Current Td	20 μs ± 20%			
Output Impedance	2 ohm or 12 ohm			
Test Interval	6 s – 99 s (the shortest time subject			
	to test voltage)			
Measuring Of Peak	Via BNC on Front Panel:			
Voltage	1000 V:1 V; Results shown on LCD;			
Measuring Of Peak	Via BNC on Front Panel: 100A:1V;			
Current	Results shown on LCD;			
No. Of Tests	1 – 999			
Triggering Mode	Automatic, manual, or external			
	triggering			
Test Method	As per standard test requirements			

Technical Parameters-10/700 μs, 5/320 μs				
Test Voltage	0.5 kV -10.0 kV ± 10%			
Voltage Tr	10 μs ± 20%			
Voltage Td	700 μs ± 20%			
Current Tr	5 μs ± 20%			
Current Td	320 μs ± 20%			
Output Impedance	15ohm or 40ohm optional			
Test Interval	11 s - 99 s (the shortest time			
	subject to test voltage)			
Measuring Of Peak	Via BNC on Front Panel: 1000V:1V;			
Voltage	Results shown on LCD;			
Measuring Of Peak	Via BNC on Front Panel:			
Current	100 A:1 V; Results shown on LCD;			
No. Of Tests	1–999			
Triggering Mode	Automatic, manual, or external			
	triggering			
Test Method	As per standard test requirements			

Technical Param	eters - 1.2/50 μs	
Test Voltage	0.5 kV-10.0 kV± 10%	
Voltage Tr	1.2 μs ± 30%	
Voltage Td	50 μs ± 20%	
Output Impedance	500 ohm	
Test Interval	5 s – 99 s (the shortest time subject to test voltage)	
Measuring Of Peak Voltage	Via BNC on Front Panel: 1000 V : 1 V; Results shown on LCD;	
No. Of Tests	1–999	
Triggering Mode	Automatic, manual, or external triggering	
Test Method	As per standard test requirements	

General Parameters				
Display	5.7" TFT color touch screen			
Operating Voltage	AC 110 V/220 V ±10, 50/60 Hz			
Fuse	6 A			
Capacity	200 W			
Storage Space	Unlimited (PC)			
Communication Method	Ethernet, RJ45			
Safety Circuit	Not operating if the open safety circuit is not closed			
Error Detection	Errors will be shown on LCD while operation will be stopped.			
Output Measuring Method	Via 1 m co-axial stable			
Dimension (W x H x D)	19", 4U (CWS 1000CM) + 6U (CWS 1000MM)			
Weight	About 40 Kg			
Operating Temp.	15 °C −35 °C			
Operating Humidity	45% - 75%			
Operating Air Pressure	86 kPa - 106 kPa			

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Standard Accessories		
Testing wire	1 pc	
Power supply cable	1 pc	
Fuse	1 pc	
Factory Inspection Report	1 pc	
User Manual	1 pc	

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1. CDN for Surge immunity tests as per IEC 61000-4-5:

SPN series:

SPN 2216S10 (10 kV external single-phase);

SPN 3816S10 (10 kV external single-phase);

SPN 3816T10 (10 kV external 3-phase)

SPN 3832T10 (10 kV external 3-phase)

2. CDN for signal lines as per IEC 61000-4-5:

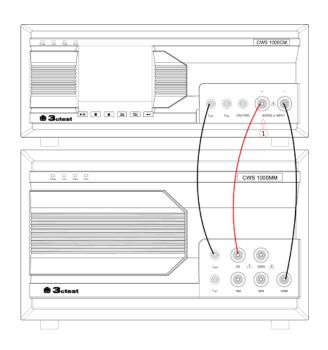
CDN 405 series (10 kV or to be customized)

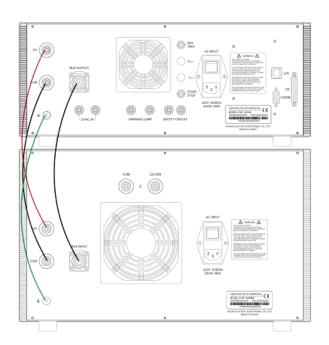
3. HV differential probe VCF-80:

Test voltage 8 kV, attenuation: 1000:1

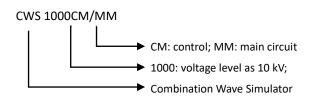
4. Wide-band Current Monitor CM 0220M

Equipment Connection Diagram:





Naming Rules:



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