

# Combination wave surge simulator

- CWS 60 Series**
- CWS 600 Series**
- CWS 800 Series**
- CWS 1000 Series**



### As per

- |                  |              |
|------------------|--------------|
| > IEC 61000-4-5  | > UL1449     |
| > IEC 61000-4-9  | > ITU-T K.12 |
| > IEC 60255-22-5 | > ITU-T K.45 |
| > IEC 61850-3    | > ITU-T K.20 |
| > EN 61000-4-5   |              |
| > EN 61000-4-9   |              |
| > IEC/EN 61326   |              |
| > GB/T 17626.5   |              |

### Description

Surge pulses occur due to direct or indirect lightning strokes to an external circuit. This leads to current or electromagnetic fields causing high voltage or current transients. Another source for surge pulsed is switching transients originating from switching disturbances and system faults. Nearly every electrical and electronic device may suffer from such surge pulses.

CWS600 is the most intelligent immunity test instrument which fully complies with CE and CCC relative standards. With external CDN and optional accessories, it can conduct for three-phase DUT and also pulsed magnetic field immunity test.

### Features

- > 5.7 inch color touch screen
- > Internal coupling/decoupling network
- > Test programmable function with easy operation
- > CDN 250V AC/16A; 110V DC-1/12A
- > Controlled external three-phase CDN
- > Surge voltage and current monitoring and LCD display
- > Ethernet, RJ45 for PC remote control, print and documentation

### Industries

- |                 |                      |
|-----------------|----------------------|
| > Communication | > Technology         |
| > Telecom       | > Military           |
| > Medical       | > Avionics           |
| > Broadcast     | > New energy         |
| > Railway       | > Electrical Vehicle |

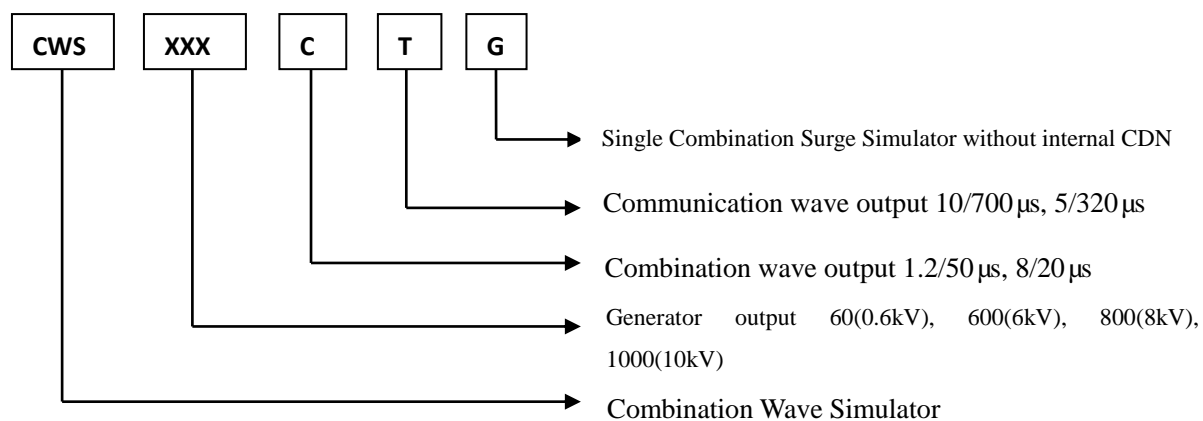
Technical parameters							
Models	Output voltage	Output waveform		Output impedance			Peak acquisition
		1.2/50 us 8/20 us	10/700 us 5/320 us	2Ω	15Ω	40Ω	
CWS 60G	20-600V	√		√			
CWS 600	0.3-6kV	√		√			√
CWS 800	0.3-8kV	√		√			√
CWS 1000	0.3-10kV	√		√			√
CWS 600T	0.3-6kV		√		√	√	
CWS 600CT	0.3-6kV	√	√	√	√	√	√

Models	Optional CDN		Optional pulsed magnetic field IEC 61000-4-9 GB/T 17626.9	Size	
	Internal single phase AC 220V 16A DC-1 110V 12A	External three phase SPN 38XXT AC 380V 16A DC-1 220V 16A(30A)		19inch/ 6U	19inch/ 8U
CWS 60G				√	
CWS 600	√	√	√	√	
CWS 800	√	√	√		√
CWS 1000		√	√		√
CWS 600T				√	
CWS 600CT			√	√	

General data	
Sync	0°-360°, 1°step or random
Polarity	+/-/alternate
Trigger mode	Auto, manual, external signal trigger
Pulse period	5-99s (shortest depending on the test current)
Test times	1-999
Failure detection	Front panel LCD display and interruption working
Working indicator	LED, LCD front panel display
EUT power injection	4mm <sup>2</sup> banana plug
Output mode	Standard 1m coaxial cable
Display screen	5.7 inch TFT color touch screen
Power supply	AC 110V/220V, ±10%, 50/60Hz, ±5% (default AC 220V, 50Hz)
Fuse	6A
Max. Power consumption	200W
Memory space	Infinite (PC)
Communication mode	Ethernet, RJ45
Size	19 inch/6U/8U
Weight	Approx. 30Kg
Temperature	15-35°C
Humidity	45%-75%
Air pressure	86kPa-106kPa

Optional accessories
<p>1. Surge CDN</p> <p>SPN series as per IEC61000-4-5</p> <p>SPN 3816T/32T (three-phase 380V 16A/32A)</p> <p>SPN 38100T (three-phase 380V 100A)</p> <p>SPN 6916T/32T (three-phase 690V 16A/32A)</p>
<p>2. Signal line/ communication line CDN as per IEC61000-4-5</p> <p>(A) 4-line communication line CDN</p> <p>(B) 8-line communication line CDN</p>
<p>3. Pulsed magnetic field converter PMC1200 as per IEC6100-4-9</p>
<p>4. Magnetic field coil</p> <p>TCXS111 single-turn coil</p> <p>TCXS113 three-turn coil 1MX1M IEC61000-4-8</p>
<p>5. HV differential probe, model VCF-80 test voltage:8KV attenuation ratio: 1000: 1</p>
<p>6. HV current sensor model: TR410</p>
<p>7. PC control software EMSLab</p> <p>With PC installed WIN XP and WIN7, it can be easily operated to make the measurement, based on the customized test program. It can identify any device with automatic configuration. It can easily generate test reports.</p>

### Naming rules



### Models





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