

## Compact Immunity Test System

## CCS 600



### As per standards

- |                     |                    |
|---------------------|--------------------|
| > EN/IEC 61000-4-4  | > EN 61543         |
| > EN/IEC 61000-4-5  | > GB/T 17626.5     |
| > EN/IEC 61000-4-8  | > GB/T 17626.4     |
| > EN/IEC 61000-4-9  | > GB/T 17626.8     |
| > EN/IEC 61000-4-11 | > GB/T 17626.9     |
| > EN/IEC 61000-4-29 | > GB/T 17626.11    |
| > EN/IEC 61008-1    | > GB/T 17626.29    |
| > EN/IEC 61009-1    | > ANSI/IEEE C62.41 |

### Summary

CCS600 is an intelligent multifunctional compact immunity (EMS) test system, as per all the requirements of international standards and product standards for transient pulse, surge and voltage dip. CCS 600 is the best option for full compliance immunity test as per the requirements of EU CE certification and CCC certification for single-phase devices. It can be built-in automatic single-phase coupling/decoupling network. Three-phase five-wire test can also be conducted by an external coupling network (up to 100A). You are provided with a variety of required accessories to meet the test requirements, such as power frequency magnetic field test.

### Feature

- > 5.7 inch color touch screen
- > Surge failure detection
- > Data acquisition of surge voltage and current
- > Test scheduling function
- > With multifunctional modules
- > Can be internal single-phase AC 250V 16A; DC 250V 16A
- > Optional for External three-phase CDN and modules
- > Ethernet, RJ45, PC for remote control, test report documentation and print

### Application

- |                    |                          |
|--------------------|--------------------------|
| > Communication    | > Information technology |
| > Telecom          | > Military               |
| > Medical          | > Aviation               |
| > Broadcast and TV | > New energy and power   |
| > Railway          |                          |

General data			
Display	5.7inch TFT color touch screen	Power supply	AC 110V/220V, $\pm 10\%$ , 50/60Hz, $\pm 5\%$ (default AC 220V 50Hz)
Fuse	6A	Max power consumption	200W
Memory space	Infinite (PC)	Communication mode	Ethernet, RJ45
Dimension (W*H*D)	19inch/6U	Weight	Approx.35Kg
Temperature range	15-35°C	Humidity range	45%-75%
Air pressure	86kPa-106kPa		
EFT/burst test as per IEC 61000-4-4			
Test voltage	0.25kV-4.8KV( $\pm 10\%$ )	Source impedance	50 ohm
Polarity	Positive, negative, alternative	Rise time	5ns $\pm 30\%$ , 50 ohm load, 1000 ohm load
Pulse waveform	5/50ns, 50 ohm and 1000 ohm load	Pulse frequency	0.1kHz-1000kHz
Pulse duration	50ns $\pm 30\%$ , 50 ohm load	Burst duration	0.075ms-750ms
	50ns-15/+100ns, 1000 ohm load	Test duration	1s-9999s
Burst cycle	11ms-9999ms	Synchronization	0° - 360°, 1° step or random
Trigger mode	Automatic, manual or external	CDN	Internal single phase automatic CDN: AC 220V 16A Max 250V
SURGE as per IEC61000-4-5			
Test voltage	0.2kV-6kV ( $\pm 10\%$ )	Test current	0.1kA-3kA ( $\pm 10\%$ )
Voltage waveform	Front time: 1.2us $\pm 30\%$ , Time to half value: 50us $\pm 20\%$	Source output impedance	2 ohm
Current waveform	Front time: 8us $\pm 20\%$ , Time to half value:20us $\pm 20\%$	Coupling capacitance	9 $\mu$ F、18 $\mu$ F
Polarity	Positive, negative, alternative	Pulse cycle	5s-99s (shortest depends on test voltage)
Coupling resistance	10 ohm、0 ohm coupling resistor or customized	Number of test	1-999
Surge voltage and current peak detection	Front panel BNC output, surge voltage: 1000V:1V Surge current :500A:1V 3 digits on display	Synchronization	0° - 360°, 1° step or random
Trigger mode	Automatic, manual or external	CDN	Internal single phase automatic CDN: AC 220V 16A Max 250V
PFMF test as per IEC61000-4-8 with optional module MFT 400/1200			

Magnetic field strength	TCXS 111 Single-turn coil: : 1-100A/m (continuous) 100-400A/m (1-10s in short time) TCXS 113 Single-turn coil : 1-300A/m (continuous) 300-1200A/m (1-10s in short time)	THID	<5%
Current waveform	50Hz/60Hz sine wave	Operating current range for short time	120A-500A
Continuous operating current range	1A-120A	Test duration	1-28800s
Waveform interval	1-9999s	Coil size	1000*1000mm or others
Trigger mode	Auto ,manual, external	Coil turn	Single/three turn
Coil shape	Rectangle or others	Output magnetic field strength	Programmable setup
Pulse magnetic field test as per IEC 61000-4-9 with optional module PMC 1200			
Output magnetic field range	100 A/m-1200A/m	Waveform	Rise time:6.4us±30%; duration: 16us±30%
Output current	100A-2000A	Polarity	Positive, negative, alternative
Synchronization	0°- 360°, 1°step or random	Pulse cycle	5-99s ( the shortest depends on test current )
Trigger mode	Auto ,manual, external	Coil shape	Rectangle
Number of test	1-999	Model of Coil	TCXS 111
Coil size	1000*1000mm	Output magnetic field strength	Programmable setup
Coil turn	Single		
Power fail test as per IEC 61000 - 4 – 11 & IEC 61000-4-29 with optional module VVT 2216SV			
EUT max. Voltage	250V AC, 220V DC	EUT max. current	AC/DC 16A continuous current ; AC 20A continuous 5s;40A continuous 3s;500A impulse current
EUT current and voltage measurement	BNC terminal: voltage 100:1, current 10A:1V	EUT Power supply	Single phase AC 220V ± 5%, 50/60Hz ± 5%; DC 220V with DC control
Interruption level	0%	Dip level	0%-100% (for VVT/VMT series) 0%, 40%, 70%, 80%(for VVTxxxxSFseries)
Dip and interruption duration	0.1-9999 cycle or 1ms-9999ms	Dip and interruption interval	5ms-9999ms
Dip and	1s-9999s	Dip and	1-5μs (100Ωload)

interruption test duration		interruption rise/fall time	
Voltage Variation level	0-100%	Time of Voltage variation decreasing	500ms-9999ms ( 50%-100% ) or 1-5us ( 100Ω load) 1000ms-9999ms ( 0%-100% ) or 1-5us ( 100Ω load)
Time of Voltage variation increasing	500ms-9999ms ( 50%-100% ) 1000ms-9999ms ( 0%-100% )	Duration after voltage variation decreasing	10ms-99999ms
Synchronization	0°- 360°, 1° step or random	Trigger mode	Auto ,manual, external

Standards	Test functions	CCS 600 Mainframe	Internal Single phase CDN	External three phase CDN	VVT series	VMT series	MFT series	PMC 1200	TCX series
IEC 61000-4-	burst	√	√	Optional					
IEC 61000-4-	surge	√	√	Optional					
IEC 61000-4-	Power frequency	√				√ ( Alternative )			√
IEC 61000-4-	Pulsed magnetic field	√						√	√
IEC 61000-4-11	AC voltage variation , dip and	√			√ ( Alternative )				
IEC 61000-4-29	DC voltage variation , dip and	√			√ ( Alternative )				

**Standard equipped**

Mainframe, user manual, test report and fuse

<b>SPN series</b>	<b>lightening surge CDN</b>	
SPN 3816T	Max.440V three-phase 16A	DC:250V/16A
SPN 3832T	Max.440V three-phase 32A	
<b>EFTN series</b>	<b>EFT/Burst CDN</b>	
EFTN 3816T	Max.440V three-phase 16A	DC:250V/16A
EFTN 3832T	Max.440V three-phase 32A	
<b>SEPN series</b>	<b>surge and burst CDN</b>	
SEPN 3816T	Max.440V three-phase 16A	DC:250V/16A
SEPN 6916T	Max.690V three-phase 16A	
SEPN 3832T	Max.440V three-phase 32A	
SEPN 6932T	Max.690V three-phase 32A	
<b>VVT series</b>	<b>Voltage variation device</b>	
VVT 2216SV	220V single phase 16A including variation	
VVT 2216S	220V single phase 16A no variation	
VVT 2216SF	220V single phase 16A standard level output	0%; 40%; 70%; 80%; 100%
VVT 2232SF	220V single phase 32A standard level output	0%; 40%; 70%; 80%; 100%
<b>MFT 1200</b>	<b>PFMF regulating device</b>	
<b>TCX series</b>	<b>Magnetic field coil</b>	
TCXS111	Single turn coil	
TCXS113	Three-turn coil	
<b>VMT series</b>	<b>Voltage variation and PFMF regulating device</b>	
VMT 2212SV	220V 10A including variation magnetic field 1200A	
VMT 2212S	220V 10A no variation magnetic field 1200A	
<b>PMC 1200</b>	<b>Pulsed magnetic field converter</b>	
<b>CCC</b>	<b>Capacitance coupling clamp</b>	
<b>EMS Lab</b>	<b>Test software</b>	



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