

CWS 500N4

SIMULATOR FOR CONDUCTED, COMMON-MODE DISTURBANCES, OHZ (DC) TO 150KHZ



FOR TESTS ACCORDING TO ...

- > IEC 60533
- > IEC 61000-4-16
- > IEC 61326
- > IEC 61543
- > IEC 61850-3

CWS 500N4 - TESTING FOR IMMUNITY TO CONDUCTED, COMMON-MODE DISTURBANCES

The CWS 500N4 is the state-of-the-art solution in a compact single-box design to test for immunity to conducted, common mode disturbances in the frequency range OHz (DC) to 150kHhz. Such test requirements are specified in IEC 61000-4-16 and cover continuous mode testing as well as short term testing with DC, 16 2/3Hz, 50Hz and 60Hz with 4 test levels each plus a sweep mode from 15Hz to 150kHz.

Complemented by an AC voltage source and a motor variac the CWS 500N4 forms a complete test systems allowing to couple the disturbance signals onto the various types of lines by means of the specified coupling networks.

HIGHLIGHTS

- > MOST COMPACT EQUIPMENT FOR COMMON-MODE DISTURBANCES AS PER IEC 61000-4-16
- > BUILT-IN LF SIGNAL GENERATOR AND LF AMPLIFIER
- > SWEEP MODE CAPABILITY 15HZ TO 150KHZ
- > BUILT-IN RECTIFIER MODULE FOR DC TESTING
- > BUILT-IN VOLTAGE METER (RMS VALUES)
- > BUILT-IN SEMICONDUCTOR POWER SWITCH

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TECHNICAL DETAILS

OUTPUT CHARACTERISTICS CONTINUOUS MODE	
Test frequencies	DC, 16 2/3Hz, 50Hz and 60Hz
Signal level	0.1 - 30Vrms or DC
Test level 1	1V continuous
Test level 2	3V continuous
Test level 3	10V continuous
Test level 4	30V continuous
Generator impedance	50ohm

INTERFACE	
Serial interface	USB
Parallel interface	IEEE 488, addresses 1 - 30
Fail 1	BNC input; test will be stopped immediately (when input becomes active low)
Fail 2	BNC input; test will be stopped (when input becomes active low) and contiunued (input active high). After 10 fail events the test will be stopped.

OUTPUT CHARACTERISTICS SHORT-TERM MODE	
Test frequencies	DC, 16 2/3Hz, 50Hz and 60Hz
Signal level	0.1 - 300Vrms or DC
Test level 1	10V for 1s duration
Test level 2	30V for 1s duration
Test level 3	100V for 1s duration
Test level 4	300V for 1s duration
Generator impedance	50ohm

GENERAL DATA	
Dimensions	19"/6HU, 555mm x 448mm x 286mm
Weight	Approx. 30kg
Supply voltage	115V - 230V +10/-15%, 50/60Hz
Input power	Max. 600W
Fuses	2x6.3AT (115V) or 2x3.15AT (230V) 2x10AT for AC-source
Cooling	Active cooling, air ventilation
Temperature	10°C - 40°C

OUTPUT CHARACTERISTICS 15HZ - 150KHZ	
Frequency range	15Hz to 150kHz
Signal level	0.1 to 30Vrms
Test level 1	1V - 0.1V - 1V
Test level 2	3V - 0.3V - 3V
Test level 3	10V - 1V - 10V
Test level 4	30V - 3V - 30V
Output impedance	50ohm

ACCESSORIES	
CN L2/l4-16	2-wire/4-wire coupling network, switchable
CDN T2-16	Telecom T-network
CN 16-x	Coupling network as per customer specification
AC power source	0 - 300VAC / 2,000W; Controlled by CWS 500N4 via serial interface
External motor variac	Controlled by CWS 500N4 via 0-10V analog output
icd.control	Extensive and most versatile remote con-trol and reporting software. A standard library helps to configure the test setup. Multiple interruption functions automated by IEEE instruments or manually. Easy to use or expandable to complex test routines on the base of vector definitions.

MEASUREMENT	
Voltage	internal rms measurement

TEST ROUTINES	
Quick Start	Immediate start; easy to use and fast discrete frequency testing
Service	Service, Set-up

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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Technical data subject to change without further notice.

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