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OCS 500M6

OSCILLATORY WAVE SIMULATOR

FOR TESTS ACCORDING TO ...

› ANSI/IEEE C37.90
› ANSI/IEEE C62.41
› IEC 60255-5
› IEC 61000-4-10
› IEC 61000-4-12
› IEC 61000-4-18
› IEC 61850-3

OCS 500M6 - COMPACT TESTER FOR RINGWAVE AND DAMPED OSCILLATORY WAVES

The OCS 500M6 includes test capabilities for ringwave up to 6kV (as per IEC 61000-4-12) and the damped oscillatory waves at 100kHz and 1MHz up to 2.5kV (as per IEC 61000-4-18).
The Ringwave is a non-repetitive damped oscillatory transient occurring in low-voltage power, control and signal lines supplied by public and non-public networks. Damped Oscillatory Waves are repetitive transients mainly occurring in power, control and signal cables installed in high voltage and medium voltage stations.
The OCS 500M6 can also be used to perform magnetic field tests as required in IEC 61000-4-10 using a magnetic field coil such as the MS 100.

HIGHLIGHTS

› **STANDALONE TEST GENERATOR**
› **INCLUDES RINGWAVE AND DAMPED OSCILLATORY WAVES**
› **BUILT-IN CDN, SINGLE PHASE OR THREE-PHASE UP TO 32A**
› **FRONT PANEL OPERATION**
› **STANDARD TEST ROUTINES**

APPLICATION AREAS

INDUSTRY
RESIDENTIAL
COMPONENTS
MEDICAL
BROADCAST

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TECHNICAL DETAILS

OCS 500M6 MODELS	
OCS 500M6	With built-in CDN 250V / 16A
OCS 500M6S2	With built-in CDN 250V / 32A
OCS 500M6S3	With built-in CDN 3x400V / 16A
OCS 500M6S4	With built-in CDN 3x400V / 32A

RINGWAVE AS PER IEC 61000-4-12 AND ANSI/IEE C62.41	
Voltage (o.c.)	250V - 6,000V ± 10%
Rise time	0.5us ± 30%
Oscillation frequency	100kHz ± 20%
Decaying	Ratio of peak 2 to peak 1: 0.4 - 1.1 Ratio of peak 3 to peak 2: 0.4 - 0.8 Ratio of peak 4 to peak 3: 0.4 - 0.8
Source impedance	12ohm and 30ohm ± 20% 200ohm for I/O lines (with CNV 504M)
Peak current (s.c.)	Max. 500A @ 12ohm or Max. 200A @ 30ohm internally; Max. 30A @ 200ohm, with CNV 504M
Rise time	‹ 1us
Oscillation frequency	100kHz ± 20%
Polarity	Positive, negative
Repetition rate	1 to 60 transients per minute

SLOW DAMPED OSCILLATORY WAVES AS PER IEC 61000-4-18	
Voltage (o.c.)	250V - 2,500V ± 10%
Rise time	75ns ± 20%
Oscillation frequency	100kHz and 1MHz ± 10%
Decaying	Peak 5 to be › 50% of peak 1 value Peak 10 to be ‹ 50% of peak 1 value
Source impedance	200ohm ± 20%
Polarity	Positive, negative
Repetition rate	Max. 50/s for 100kHz and Max. 500/s for 1MHz
Burst duration	At least 2s

TRIGGER CIRCUIT	
Release of pulses	Automatic, manual, external
Synchronization	0° - 360°, resolution 1°

OUTPUT	
Direct	Via HV-safety lab connectors
Coupling mode	Line to line Line(s) to ground (PE)
DUT supply 1ph-16A	AC: 250V/16A; 50/60Hz DC: 250V/10A
DUT supply 1ph-32A	AC: 250V/32A; 50/60Hz DC: 250V/20A
DUT supply 3ph-16A	AC: 3x440V/16A; 50/60Hz DC: 250V/10A
DUT supply 3ph-32A	AC: 3x440V/32A; 50/60Hz DC: 250V/20A
CRO trigger	5V trigger signal for oscilloscope

MEASUREMENTS	
Ring wave	Peak voltage and peak current in LCD

TEST ROUTINES	
Quick Start	Immediate start; easy-to-use and fast
Standard Test routines	As per IEC 61000-4-12, Levels 1 - 4 Manual Standard Test routine As per ANSI/IEEE C62.41 As per IEC 61000-4-10, up to Level 5
User Test routines	Change polarity after n pulses Change coupling after n pulses Change voltage after n pulses Change phase angle after n pulses

INTERFACE	
Serial interface	RS 232, baud rate 1,200 - 19,200
Parallel interface	IEEE 488, address 1 - 30

GENERAL DATA	
Dimensions, weight	19"/6HU, approx. 28kg (1-phase) 19"/6HU, approx. 33kg (3-phase)
Supply voltage	115/230V +10/-15%
Fuses	2 x T 2AT (230V); 2 x T4AT (115V)

OPTIONS	
CNV 504M	4-wire coupler for signal/data lines
MS 100	Magnetic Field coil for IEC 61000-4-10 application
iec.control	Software to control the test, including standard library, test report facility and data conversion generator

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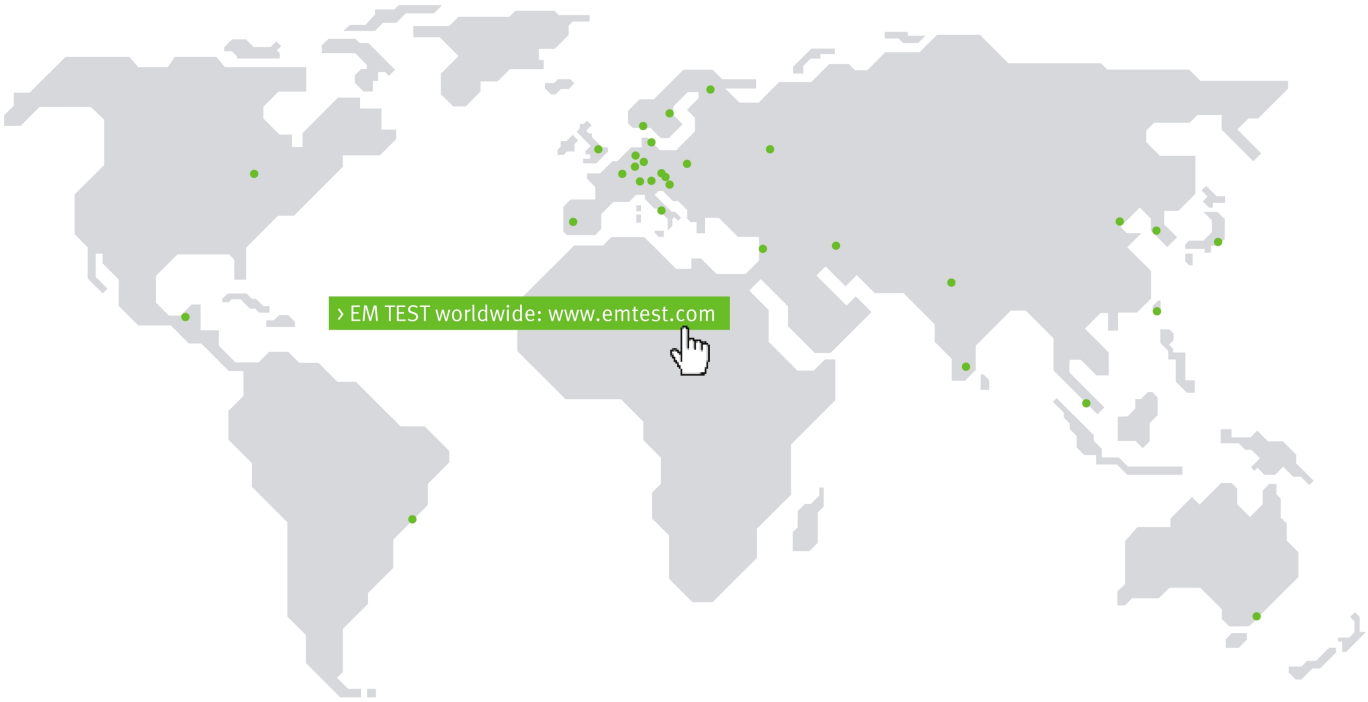
COMPETENCE WHEREEVER YOU ARE



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