

# DCS06.B - DCS12.B Transient generator

This automated test system has been designed in compliance with the UK DEF STAN 59-411 Part 3, sections DCS06.B and DCS12.B.

This damped oscillatory wave generator can produce 4 test frequencies: 100 kHz (DCS06.B), 15.9 kHz (0.15  $\Omega$ , DCS12.B), 15.9 kHz (0.4  $\Omega$ , DCS12.B) and 10.9 kHz (2.5  $\Omega$ , DCS12.B).

A complete set of accessories for test and measurement is proposed including one dedicated inductive coupler, two coupling transformers, current and differential voltage probes, etc.

Montena's PC-based automation software does the rest; it assists the operator during the calibration and the test procedures as well as for the generation of a test report.



## SPECIFICATIONS

Type	PG-DCS06B-DCS12B
Standard	DEF STAN 59-411 Part 3, DCS06.B and DCS12.B
Nominal charging voltage	2 kV positive only
Output waveform	damped oscillatory wave
Repetition rates	external, single, 1 s to 120 s (DCS06.B), 2 s to 120 s (DCS12.B)
Test time (repetitive mode)	1 - 600 seconds (10 minutes)
Maximum sequence duration	10 min.
Output signal connections	N 50 ohm
Power rating	90 - 250 Vac / 50 - 60 Hz / 35 W / 75 VA
Electrical safety	complies with EN 61010-1
Remote control interfaces	RS232 and USB
Storage / operating temperatures	5 - 50 °C / 20 - 45 °C
Generator weight	complete unit: 34.5 kg / subrack only: 17.0 kg
Dimensions (L x W x H)	630 x 530 x 485 mm ; 19" subrack only: 630 x 485 x 405 mm (9U)

## List of discrete frequencies

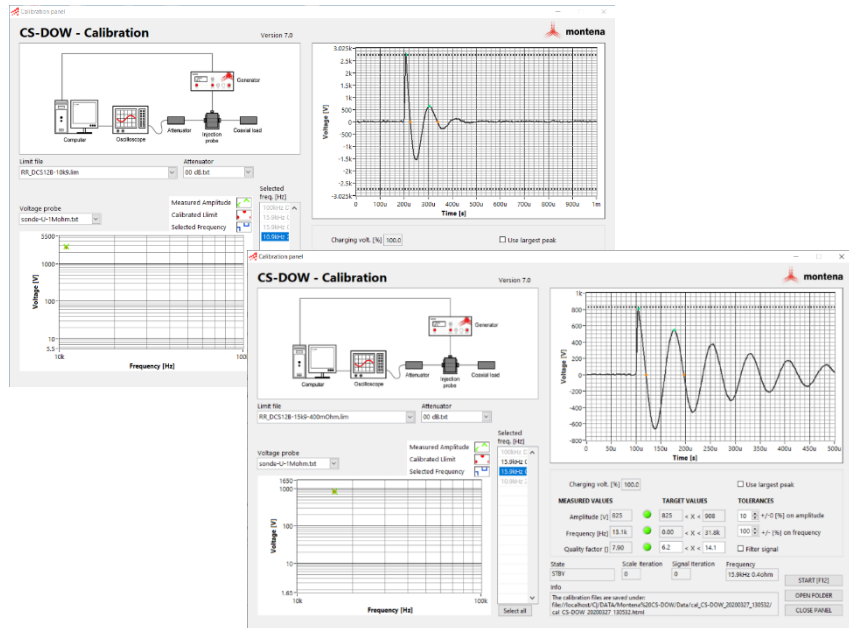
Oscillation frequency	DCS06.B - IMPORTED LONG TRANSIENT SUSCEPTIBILITY AC AND DC SYSTEMS		DCS12.B - IMPORTED LF TRANSIENT SUSCEPTIBILITY POWER LINES	
	Output voltage on 5 $\Omega$ load	Relative amplitude of 3rd $\frac{1}{2}$ cycle	Output voltage on 10 $\Omega$ load	Relative amplitude of 3rd $\frac{1}{2}$ cycle
100 kHz	0 - 550 V	0.3 - 0.45	-	-
15.9 kHz 0.15 $\Omega$	-	-	0 - 825 V	0.6 - 0.8
15.9 kHz 0.4 $\Omega$	-	-	0 - 825 V	0.6 - 0.8
10.9 kHz 2.5 $\Omega$	-	-	0 - 2750 V	0.2 - 0.3

All values with dedicated injection probe and coupling transformers.

## Automation software

The transient generator and the measurement equipment are remote controlled through RS232, LAN or USB by a dedicated control software application which:

- automatically calibrates the setup according to standard or user defined injection levels
- automatically applies the test sequences
- automatically generates the calibration and test reports
- set the applied perturbation levels and collect measured data, which reduces to almost zero the risk of conversion errors.



## Ordering information

TYPE	DESCRIPTION
<b>PG-DCS06B-DCS12B</b>	transient generator for DEF STAN 59-411 Part 3, DCS06.B and DCS12.B

## Related products / accessories

TYPE	DESCRIPTION
<b>SW-CS-DOW</b>	Windows-based control software application, for montena damped oscillatory wave generators
<b>IC100K</b>	inductive coupler for DCS06.B, opening 34.6 mm
<b>TR-DCS12B</b>	set of 2 coupling transformers for DCS12.B, max EUT current 32 A
<b>R5-4-2K</b>	load resistor 5 ohm, 4 W, 2 kV peak, for DCS06.B
<b>R10-4-2K</b>	load resistor 10 ohm, 4 W, 2 kV peak, for DCS12.B