

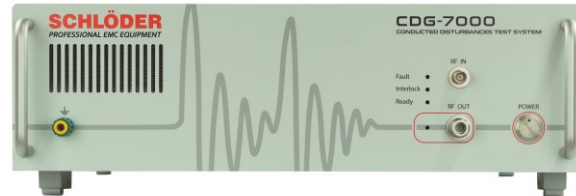
## CDG 7000-E

Compact generator for immunity tests with 3-channel voltmeter

Depending on ext. amplifier:

IEC/EN 61000-4-6, IEC 60601-1-2 Ed. 4.1,  
IEC 61000-4-39, MIL 461 CS 114, ISO 11452-4,  
Namur

- The compact device consists of **RF signal generator, 3-channel RF voltmeter and directional coupler**
- Frequency range of the generator/power meter (4 kHz):  
**9 kHz – 1200 MHz**
- Frequency range of the directional coupler:  
10 kHz – 1000 MHz, 200 W



**Compact generator für  
Conducted Immunity**

### Overview

New test generator for interference immunity standards and magnetic fields against conducted interference induced by high frequency fields. One of the very few combined IEC 61000 4-6 test systems that include the RF signal generator, a 3-channel RF voltmeter and a directional coupler for a competitive price.

The standard describes a test setup in which these high frequency interferences can be influenced on a EUT without a complicated structure with antennas, field instrumentation and shielded rooms.

By using coupling networks and coupling clamp's sine waves are induced directly into power and signal lines. We offer an extensive range of accessories for this purpose. The test object retains its original place in the device structure, so that the system can be tested in its overall function.

### Key Facts

- The included application software (**HELIA 7-Basic**) enables extensive reporting functions and EUT monitoring (HELIA 7 BCI requires for BCI testing)
- Simple expansion with external amplifier via 2<sup>nd</sup> generator output
- Interfaces: USB, LAN, GPIB (option)
- Warranty 3 years

# CDG 7000-E

## Compact generator for immunity tests with 3-channel voltmeter

### Technical data I

#### RF Generator / Powermeter

Two switchable outputs (only one can be used simultaneously)	2 x SMA
Frequency range	9 kHz - 1.2 GHz (usable from 4 kHz)
Frequency resolution	1 Hz
Output level range	0 to - 63 dBm
Output level resolution	0.1 dB
Harmonics	< 30 dBc
Spurious	< 45 dBc
Amplitude modulation (internal)	0 - 100 %, resolution 1 %
Amplitude modulation (external)	0 – 100 % , max. Amplitude 1 V = 100 %, BNC jack
Pulse modulation (internal)	5 - 95 %, resolution 1 %
Pulse modulation (external)	DC...1 MHz, 3,3/5 V CMOS/TTL, BNC jack

#### Internal path switching by coaxial relay

Power	max. 700 W @ 0 ...1 GHz
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#### Directional coupler\*

Frequency range	10 kHz – 1 GHz
Maximum power	200 W
Coupling attenuation	40 dB

\*optionally max. 500 W with coupling attenuation 50 dB available

#### LF Generator (Modulation)

Connector	BNC jack
Frequency range	1 Hz - 100 kHz
Frequency resolution	0.1 Hz
Signal	Sine wave / square wave / triangular
Amplitude	0...1 V

#### RF Voltmeter ((test level))

Connector	BNC jack
Frequency range	9 kHz - 1.2 GHz (usable from 4 kHz)
Measuring range	-40 to +30 dBm

#### RF Voltmeter 2+3 (forward / reverse power)

Connector	2 x SMA
Frequency range	9 kHz - 1.2 GHz (usable from 4 kHz)
Measuring range	-40 to +33 dBm + directional coupler (typ. 40 dB)



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Compact generator for immunity tests with 3-channel voltmeter

## Technical data II

Module	
<b>EUT-MONITOR INPUT</b>	
Input voltage	0 to 10 V DC
Resolution	2.5 mV
Input impedance	100 kΩ
<b>EUT-FAILED INPUT</b>	
Input signal	3,3/5 V CMOS/TTL level
Detection mode	status or edge controlled
Temperature measurement	10 - 100 °C (1039 to 1385 Ω ) resolution < 1 °C (PT 1000)
<b>SCPI Interfaces</b>	
USB 2.0	USB-B
LAN, 100 Mbit	RJ45
GPIB (optional)	Centronics

Module	
<b>DIGITAL I/OS</b>	
Out	4 Bit Digital out, 5 V CMOS/TTL
In	4 Bit Digital in, 5 V CMOS/TTL
<b>INTERLOCK</b>	
Closes at	R < 1 kΩ
<b>General data</b>	
Temperature range	0 - 40 °C
Housing	19" desktop case (84 TE; 3 HE)
Weight	approx. 11 kg
Width / height / depth	app. 450 / 135 / 504 mm
AC Input	100 - 240 VAC; 50/60 Hz

## Included in scope of delivery

- Power cable V-Lock
- Ground terminal
- USB cable
- BNC connector, 50 Ohm resistor
- 2 x Socket strips and 3 x SMA fixed cables (already connected)
- USB dongle for HELIA software
- User manual
- USB stick including calibration certificate, user manual, HELIA software.
- 4 x RF cable:
  - BNC male -- N male, 1.5 m (L0023),
  - N connector - N connector, 1.5 m (L0068),
  - BNC male - TNC male, 1.5 m (L0024),
  - N connector - BNC connector angled (only for 75 W version), 30 cm (L0069)

All information regarding appearance and technical data correspond to the current state of development at the time of release of this data sheet. We reserve the right to make technical changes. 102307

