

Your partner for professional EMC solutions



Quality Reliability Service

OUR COMPANY

Schlöder GmbH has been developing and producing EMC test equipment for 30 years. These test and measurement devices ensure that your equipment meets the requirements of the different IEC standards.

We manufacture EMC products with the highest standards of quality and durability. The development, construction and functional tests of the devices are carried out in Germany. Together with an outstanding service you decide for investment security and sustainability when buying Schlöder products.

Our equipment is suitable for EMC tests on systems and installations according to the listed IEC standards.

With our partners we complete our product portfolio – for safe and EMC-compliant use of equipment.

Test and measurement technology

With a wide range of products, our particular strengths lie in the following areas:

- ESD
- Burst Immunity
- Surge Immunity
- Conducted Immunity (DC-400 MHz)
- Magnetic Field Immunity (DC-250 kHz)
- Voltage Interruption

Here we have many years of experience and a comprehensive range of consulting, products and services.



CDG 7000, Conducted Immunity Generator



The CDG 7000 is our new test generator for all standards on immunity to conducted disturbances induced by high-frequency fields – including BCI tests (ISO 11452-4, MIL STD 461G). The device combines RF signal generator, RF power amplifier, 3-channel RF voltmeter and directional coupler – and is one of the few combined IEC 61000-4-6 test systems on the market.

The supplied application software (HELIA 7 - Basic) enables extensive reporting functions and EUT monitoring (HELIA 7 BCI requires for BCI testing). There are different models of the CDG 7000 available. We also offer a variaty of coupling networks and EMC clamps.

CDG 7000-25

- 100 kHz 250 MHz
- Amplifier 25 W
- Maximum test level: 10 V (15 V) with 80 % AM (without 6 dB)

CDG 7000-75

- 100 kHz 400 MHz
- Amplifier 75 W
- Maximum test level: 30 V (40 V) with 80 % AM (without 6 dB)

CDG 7000-75-10

- 10 kHz 250 MHz
- Amplifier 75 W
- Maximum test level: 30 V (40 V) with 80 % AM (without 6 dB)

CWG 2500, Surge Generator

The CWG 2500 test generator simulates high-energy interference pulses and is suitable for carrying out EMC tests on systems and installations according to the IEC / EN 61000-4-5 standards, VDE 0843-5 and others.



The simple operation is carried out via a capacitive, clearly arranged colour touch display. The normative test levels are pre-programmed, additional test sequences can be stored via the memory function. The CWG 2500 can also be controlled by PC via the USB interface or optional fiber optic interface.

SFT 2400, Burst Generator

The SFT 2400 with integrated coupling network simulates fast transient interference pulses (EFT) as defined in the standards IEC 61000-4-4 and EN 61000-4-4. Due to the very short rise time of 5 ns, the individual pulses generate a broadband RF spectrum up to 300 MHz.



In addition, the SFT 2400 offers various special functions such as "real burst", which simulates the natural appearance of the burst pulse, or "noise", with which contact bounce can be simulated.

Instrument selection for the following standards:			
ESD simulators	EMC generators / measuring systems		Magnetic field generators, -calibrators
SESD 216	SFT 1400 / SFT 1420	VIS 1700	 MGA 1033
IEC 61000-4-2	IEC 61000-4-4	IEC 61000-4-11	EN 55103-1
EN 61000-4-2	EN 61000-4-4	EN 61000-4-11	EN 55103-2
		IEC 61000-4-29	IEC 61000-4-8
SESD 230	SFT 2400/2420	EN 61000-4-29	EN 61000-4-8
IEC 61000-4-2	IEC 61000-4-4		MIL-STD-461 E/F RS 101, CS 101
EN 61000-4-2	EN 61000-4-4	PGA 1240	MIL-STD-461 E/F RE 101, CE 101
		IEC 61000-4-16	ISO 11452-8
SESD 30000	CWG 1500 / CWG 2500	EN 61000-4-16	PSA B217110
ISO 10605, 2008	IEC 61000-4-5	EN 61000-4-19	SAE J 1113-2
Automotive	EN 61000-4-5	IEC 60255	SAE J 1113-22
IEC 61000-4-2	IEC 61010-1, Ed.3	IEC 61000-4-19	DC-11224
EN 61000-4-2		FORD CI 250	DC 1014
	CDG 7000		GM W 3097
SESD 2910	IEC 61000-4-6	PG 01-2000	Ford ES_XW7T-1A278-AC
EN 13763-13	EN 61000-4-6	FNN Leitfaden,	
VG 95378-11	ISO 11452-4	Kap. 3.7.1	 Cal 1250
			IEEE 644



EMC cables and signal cables

In order to achieve a very high noise immunity against conducted and radiated interference for connected devices, our power and signal connection cables are an excellent solution.

When a cable is subject to electromagnetic interference radiation, the electric field component is mainly reflected, while the magnetic field component is partially attenuated by eddy currents generated on the surface of the shielding. The ferrite filled material (EMC/COM), e.g. on the shielding braid of a shielded cable causes a considerable damping of the sheath currents on the braid.

As a partner of Kabelwerk Eupen AG, we have found a pioneer in the development of new technologies to meet the requirements of industry and end users for non-interfering and electromagnetically immune systems.

NK-SG EMV Power cable and signal cable

The ready-made power supply cables NK-SG-X are sheathed with a ferrite coating and thus become a low-pass filter. High frequencies are absorbed by the magnetic and electrical losses of the ferrite granulate, the HF energy is converted into heat.

Our power cables are also available as yard ware in various designs and assemblies.





SESD 230, ESD Generator

The ESD simulator SESD 230 is suitable for carrying out EMC tests on systems and equipment according to the IEC / EN 61000-4-2 standard (ESD test).

Test levels can be set far beyond the standard limits. You can choose between two test methods: air and contact discharge (30 kV). During contact discharge, a contact check takes place automatically.

The test procedures are also automatically programmable. For standard tests up to 16 kV we offer the SESD 216.

SESD 230

- Air- and contact discharge
- Air discharge: ±0,5 kV to ±30 kV, 100 V steps
- Contact discharge: ±0,5 kV to ±30 kV, 100 V steps
- Output-voltage:

Adjustment via digital potentiometer

SESD 216

- Air- and contact discharge
- Air discharge: ±0,2 kV to ±16,5 kV 100 V steps
- Contact discharge: ±0,2 kV to ±10,0 kV, 100 V steps
- Output-voltage:
 - Adjustment via digital potentiometer

SERVICE



Calibrations

Regular calibrations are necessary to determine whether the defined technical parameters of a test and measurement device are within the standard.

In general we distinguish the following characteristics of calibrations:

Factory calibration (traceable according to ISO 17025)

Accredited calibration (DAkkS, ISO 17025) Repair

Already during the development and production of our devices, we attach great importance to the selection of our components – this guarantees a long and low-maintenance life cycle.

But even in the worst case scenario we can usually react. We can even find repair solutions for devices that are more than 20 years old. Instead of being thrown away, the device can then be returned to you in the laboratory. **That is our contribution to sustainability.** You buy a high-quality Schlöder device and suddenly the corresponding standard changes,

nversion for standards

what now? We are regularly confronted

with this situation. We meet this challenge by providing information in good time and developing conversion sets.

This enables a long service life for the valuable equipment and offers you a high degree of investment security.

Accredited calibration (DAkkS, ISO 17025)

For the accredited calibration of our products we work together with different partner laboratories. The advantage of an accredited calibration is the acceptance by auditors and in international business. In case of deviations from the standard parameters, the devices are not being adjusted. An accredited calibration is usually required annually for the companies concerned. Since we receive special prices from the partner laboratories as quantity orderer, please ask for an offer.

Factory calibration (traceable to ISO 17025)

During a factory calibration we put our devices through their paces in our own laboratory. If we detect deviations from the specified standard parameters, we usually adjust the device without any additional charge.

As part of the factory calibration – which we recommend to be carried out every two years – we also carry out free firmware updates.

Worldwide - reliable EMC service.

Worldwide - reliable EMC safety.



All information about the appearance and technical changes correspond to the current state of development at the time of release of this flyer. We reserve the right to make technical changes.

You can find our current partner list on the Internet at www.schloeder-emv.de



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