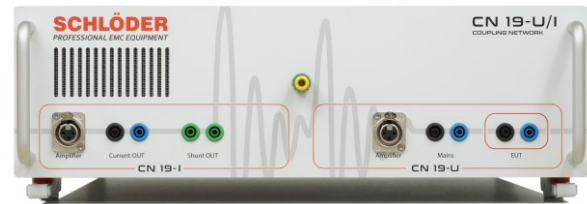


## CN 19 U-I

### Coupling network with integrated current transformer

#### IEC / EN 61000-4-19

- For tests acc. to IEC / EC 61000-4-19
- Frequency range: 2 kHz – 150 kHz
- EUT voltage: 500 V AC (50/60 Hz), 700 V DC



**For tests according to IEC / EN 6100-4-19.**

#### Overview

The described **CN 19 U-I** together with our function power generator and the associated software, enables a seamless test solution that is completely compliant with the standard for voltage signals

The **CN 19 U** section meets all requirements of the coupling network described in IEC/EN 61000-4-19. Since the output of the function power generator is very low impedance, the 10  $\Omega$  source resistance was implemented in the CN. Galvanic isolation between amplifier and EUT circuit by a 1:1 transformer additionally increases safety.

The **CN 19 I** section meets all requirements of the coupling network described in chapter 6.1.3 of IEC/EN 61000-4-19.

This CN also provides galvanic isolation between amplifier and EUT circuit, but this time with a transmission ratio of 2:1 to better match the load impedance for the function power generator. For current measurement, a low-inductance four-wire shunt is built in, which closes the control loop with a corresponding SCPI-capable multimeter. Make sure that the multimeter is located in the test circuit and that high common-mode line voltages may therefore be present.

#### Key facts

- Consisting of the modules: Coupling network with current transformer
- EUT voltage 500 V AC (50/60 Hz), 700 V DC



# CN 19 U-I

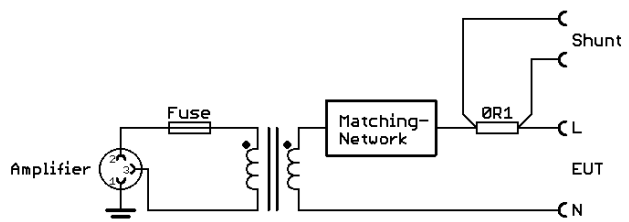
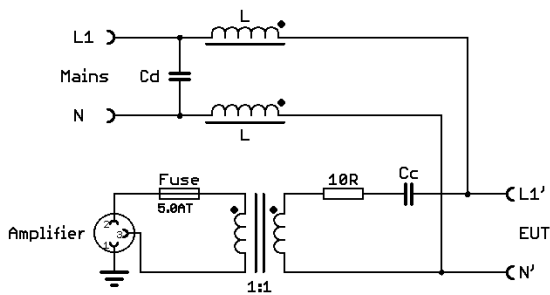
## Coupling network with integrated current transformer

### Technical data

CN 19 U	
Frequency range	2 kHz – 150 kHz
Level	0...25 Vrms cont.
Source impedance	10 Ω ±3 Ω max. (±1 Ω typical)
EUT Voltage	500 V AC (50/60 Hz), 700 V DC
Max. EUT current	16 A cont. AC/DC
Voltage drop Mains EUT	13 V typical (16 A/50 Hz)
Amplifier input	XLR female (1: chassis/ground, 2: signal +, 3: signal -)
Mains	4 mm safety sockets (black/blue)
EUT	4 mm safety sockets (black/blue)
High voltage test amplifier - EUT	1,9 kV DC (10 sec)
General data	
Dimensions (H x W x D)	15,7 x 48,2 x 54 cm
Weight	11,2 kg
Temperature range	5...40 °C

CN 19 I	
Frequency range	2 kHz – 150 kHz
Level	0...10 Arms cont.
Source impedance	1 Ω ±0,3 Ω max. (±0,1 Ω typical)
Four-wire shunt	0,1 Ω ±1 mΩ max.
EUT Voltage	500 V AC (50/60 Hz), 700 V DC
Amplifier input	female (1: chassis/ground, 2: signal +, 3: signal -)
EUT current output	4 mm safety sockets (black/blue)
Shunt output	4 mm safety sockets (green)
Power supply	external 24 V/1 A AC/DC- power supply unit
High voltage test amplifier - current output	1,9 kV DC (10 sec)

### Block diagram: CN U      Block diagram: CN I

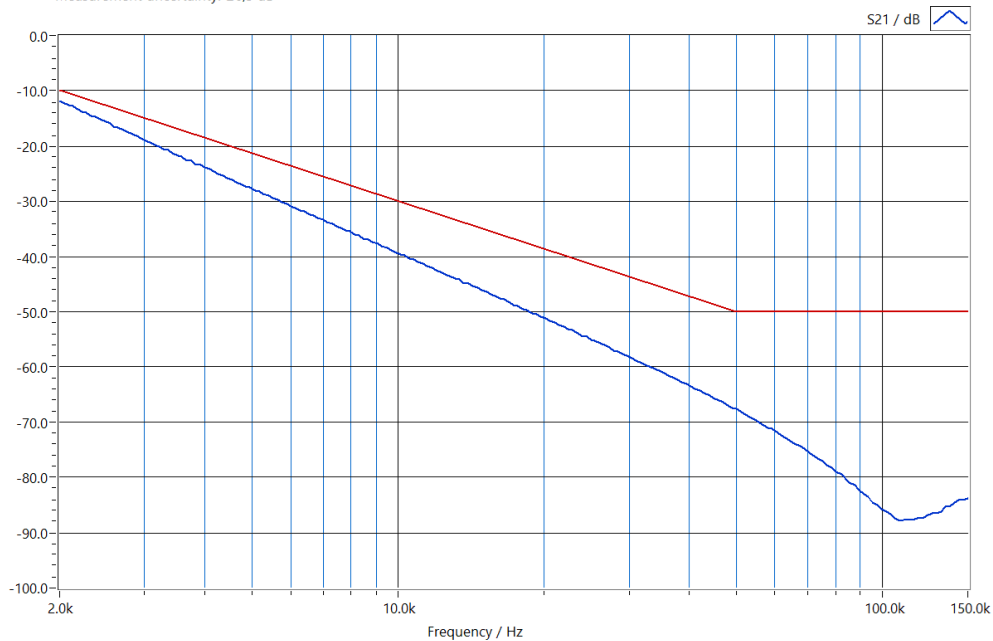


## CN 19 U-I

### Coupling network with integrated current transformer

#### Decoupling

Network Analyser HP8751A (S.-No.: 3315J01756), Test Set 87512A (S.-No. MY43100614)  
Insertion loss EUT - Mains Port, measurement method acc. IEC/EN61000-4-19  
Measurement uncertainty:  $\pm 0.5$  dB



#### Accessories (included in delivery)

XLR connection cable

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. 270421

