

## LISN type LISN-4-250

MTS-No. R65.00.0011

### Application

Within the range of the line-bounded interfering voltage measurement technique, the standard CISPR-16-1 demands measuring instruments which are simulating a reproducible impedance of the mains supply and are blocking disturbances out of the mains. If a frequency range of 150 kHz to 30 MHz is existing, a so-called LISN is required with a defined developing of impedance.

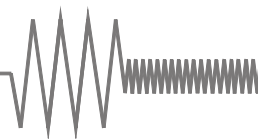
### Description

For this purpose MTS Systemtechnik has developed a LISN which fulfills the requirements of the CISPR 16-1. This LISN has 4 phases with a maximum ampacity of 2x 250 A.



### Characteristics

- ▶ LISN according to CISPR, EN, VDE, ANSI
- ▶ Frequency range 150 kHz to 30 MHz
- ▶ Permanent current up to 4x 250 A
- ▶ Test connection through protection conductor socket
- ▶ Air-core coil
- ▶ Small insertion loss
- ▶ International style (G, GB, F, I, CH, USA)
- ▶ Operating voltage switchable (115/ 230V)
- ▶ 84 TE desktop case with 8 HU
- ▶ Remote controlable over TTL-levels
- ▶ Calibrated according to CISPR 16-1:1999



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### Configuration:

4x 250 A

### Technical data:

#### 1 RF-specifications:

1.1 Impedance	50 Ω // 50 μH + 5 Ω 34,3 Ohm (+/- 20%) @ 150 kHz 39,0 Ohm (+/- 20%) @ 200 kHz 44,0 Ohm (+/- 20%) @ 300 kHz 49,0 Ohm (+/- 20%) @ 700 kHz 50,0 Ohm (+/- 20%) @ 30 MHz
1.2 Frequency range	150 kHz to 30 MHz
1.3 Isolation	>30 dB (phases) >30 dB (DUT-MAINS)
1.4 Insertion loss:	<2,0 dB
1.5 Limiter	140 dBμV (fixed)
1.6 Attenuator	20 dB/ 2W (fixed)
1.7 PE-simulation	50 μH / 16 A air-core coil (connectable)
1.8 Operating voltage	115/ 200 VAC (DC-63 Hz) 230/ 400 VAC (DC-63 Hz)
1.9 Auxiliary current supply	115 / 230 V - 60 VA switchable
1.10 Power rating	4x 250 A
1.11 Internal voltage drop	max. 5% of the operat. voltage
1.12 DC-resistance	<10 mΩ typ.
1.13 Cooling	4x fan 120 mm

#### 2 Connections:

2.1 Front side	High current connections (DUT) Grounding pin (M10) Test receiver (BNC female)
2.2 Rear side	High current connections (mains) Grounding pin (M10) RF-ground (135x 35 mm) Remote control (15 pol.) Rubber connector

#### 3 General specifications:

3.1 Indication	Measuring path (LED, green) Remote mode (LED, red) Temperature rise (LED, red)
3.2 Remote control	TTL-level
3.3 Operating temperature	+5 °C to +60 °C
3.4 Reference temperature for specifications	+5 °C to +60 °C
3.5 Storage temperature	-30 °C to +70 °C
3.6 Dimensions	84 TE desktop case x 8 HU x 580 mm (dimensions including connections)
3.7 Colour	Front side colourless anodized Rear side colourless anodized
3.8 Weight	39,5 kg

#### 4 Delivered parts:

LISN-4-250  
High current connectors (8 pcs.)  
Power cord, 1m  
CD-ROM with manual, correction values and test certificate

#### 5 Comments:

Warranty	12 months
Intervall of calibration	12 months
RoHS-compliant	Yes

#### 6 Recommended accessories:

Remote adapter (RS-232, USB or Rohde & Schwarz)  
Cable assemblies  
High current connect. cables  
Calibration adapter