



HV-AN 500 HIGH VOLTAGE ARTIFICIAL NETWORK



- 5 μ H AN/LISN
- 500 Amps
- High voltage part of CISPR 12 (draft), CISPR 25, ECE No. 10 R05/R06, ISO 11452-1 and ISO/DTS 7637-4
- ISO 7637-2
- Low voltage part of CISPR 25, ECE No. 10 R06 and ISO 11452-1 with HV-AN 500-option-1 μ F

The artificial network HV-AN 500 offers a solution for high current and high voltage connections to the EUTs. The AN is used to simulate the impedance of a vehicle harness to determine the behavior of EUT and meet the requirements of ISO 7637-2 and the HV part of CISPR 12 (draft), CISPR 25, ECE No. 10 R05/06, ISO 11452-1 and ISO/DTS 7637-4. The optional available HV-AN 500-option-1 μ F, connected on the AE port of the HV-AN 500, allows testing of the LV part of CISPR 25, ECE No. 10 R06 and ISO 11452-1.

Technical specifications

Frequency range:	100 kHz to 100 MHz
Power ratings (EUT/AE)	
AC max. voltage:	500 V _{RMS}
DC max. voltage:	1000 V _{RMS}
Current max.	
passive, cooling (Fan) off:	200 A _{RMS} (CW), 300 A _{RMS} (for 20 min)
active, cooling (Fan) on:	500 A _{RMS} (CW) (for 2 hours)
Test voltage:	1500 VDC 2 sec.
Simulated impedance (EUT):	5 μ H 47.6 Ω \pm 20%, High voltage part of CISPR 12, 25, ECE No. 10 R05/R06, ISO/DTS 7637-4, ISO 11452-1 (jumper 1 & 2 connected) 5 μ H 50 Ω \pm 10%, ISO 7637-2 (jumper 1 & 2 removed) 5 μ H 47.6 Ω \pm 20%, Low voltage part of CISPR 25, ECE No. 10 R06, ISO 11452-1 (jumper 1 connected, jumper 2 removed, HV-AN 500-option-1 μ F connected on AE port)
DC resistance (AE/EUT):	1 m Ω
EUT/AE sockets:	16 mm bolt with fine screw nut (M16x1.5)
Connector chassis:	16 mm bolt with screw nut (M16)
RF socket:	Type-N, jack/ female 50 Ω
Connector for cooling:	coaxial connector (male, DC+ on inner pin)
Requirements for cooling:	12 V DC, approx. 1.1 A
Power supply for cooling:	12 V DC/ 2.5 A, length 1.8 m, coaxial connector (female) 5.5 x 2.5 mm

Mechanical specifications

Size (L X W x D):	365 mm x 203 mm x 203 mm
Weight:	approx. 8.5 kg

Environmental conditions

Classification:	Indoor use only
Operating temperature:	0 $^{\circ}$ C to +30 $^{\circ}$ C
Storage temperature:	-10 $^{\circ}$ C to +60 $^{\circ}$ C
Relative humidity:	up to 90 % (no moisture condensation)

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HV-AN 500, view to the EUT port



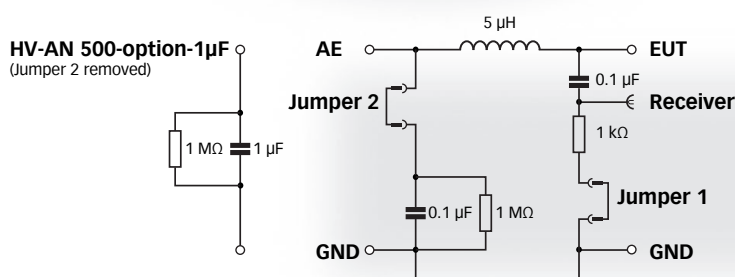
HV-AN 500, view to the AE port

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Example of HV-AN 500 schematic



Standard	Jumper 1	Jumper 2	HV-AN 500-option-1µF
High voltage part of CISPR 25, CISPR 12, ECE No. 10 R05/R06, ISO 11452-1, ISO/DTS 7637-4	●	●	–
ISO 7637-2	○	○	–
Low voltage part of CISPR 25, ECE No. 10 R06, ISO 11452-1	●	○	✓

“●” jumper used, connected, “○” no jumper, not connected, “✓” option on AE port connected

Model No. and options

Part number	Description
259606	HV-AN 500 5 µH high voltage artificial network, 500 A, unshielded, for Automotive conform with ISO 7637-2 and HV part of CISPR 12 (draft), CISPR 25, ECE No.10 R05 / R06, ISO 11452-1 and ISO 7637-4
97-259606	HV-AN 500-TC Traceable calibration (ISO17025), order only with the device
98-259606	HV-AN 500-ACC Accredited calibration (ISO17025)
259607	SME HV-AN 500 Shielded metal enclosure for two HV-AN 500
259609	HV-AN 500-option-1µF External 1 µF for HV-AN 500 for testing the low voltage part of CISPR 25, ECE No. 10 R06 and ISO 11452-1
259667	CAS HVAN500 Calibration set for HV-AN 500
257521	A 50-N Termination 50 Ohms, N type, male, 1 Watt, 4 GHz