# SHC-1/1000 SHC-2/1000

**CISPR** Passive Voltage Probes

# **Main Features**

- 9 kHz to 30 MHz frequency range
- CISPR 16-1-2 compliant
- Suitable for lines up to 1000 Vac 1500 Vdc
- 30 or 35 dB insertion loss
- Interchangeable, robust contact tip and alligator clip

According to the main EMC standards - CISPR, MIL-STD, IEEE/ANSI, etc. - the passive voltage probes are ancillary devices specifically designed to measure conducted disturbances when a LISN cannot be used, e.g. because the EUT requires currents exceeding the capabilities of available LISNs.

As several generic and product standards may require the use of passive voltage probes, they are a must in a well equipped EMC lab and on the test bench of any design engineer.

A passive probe connected to the RF input of an EMI receiver picks up the RF disturbance signal from the line under investigation. It also provides a standardized impedance and blocks the main AC/DC voltage, while signal attenuation protects the receiver front-end from saturation and damages.

When operating the voltage probes, users must be sure to take all safety precautions relating to the AC or DC line voltages.



## SHC-1/1000, SHC-2/1000

**Passive probes** 

#### SPECIFICATIONS

SPECIFICATIONS	
Frequency range	9 kHz to 30 MHz
Input resistance	$1500 \Omega \pm 80 \Omega$
Input reactance	< 1500 Ω (< 1200 Ω typical)
Insertion loss	SHC-1/1000 35 dB ± 1.5 dB
	SHC-2/1000 30 dB ± 1.5 dB
RF output	BNC female, 50 Ω
Max permissible input operating voltage	1000 Vac; 1500 Vdc
EUT terminal	4 mm jack with alligator clip and probe tip
Ground connection	Alligator clip
Operating temperature	0 °C to +45 °C
Storage temperature	-25 °C to +70 °C
Dimensions WxHxD	45 x 45 x 200 mm
Weight	250 g
Supply M	ains
	EUT
	Xc<1500 ohm 📥 C
	(1500 B) alam 5
	(1500 - R) ohm 🗲
XI	L>R <b>5</b> To Receiver
GROUND	

## **Ordering information:**

#### SHC-1/1000 Passive Probe

Includes: user's manual, carrying case 170/30N, 2 m BNC-BNC cable, red alligator clip, red test probe tip and safety cap, calibration certificate.

SHC-2/1000 Passive Probe

Includes: user's manual, carrying case 170/30N, 2 m BNC-BNC cable, black alligator clip, black test probe tip and safety cap, calibration certificate.

## **Related products**

- Receivers
- 7010/00: EMI Receiver 150 kHz to 1 GHz
- 7010/01: EMI Receiver 9 kHz to 1 GHz
- 7010/02: EMI Receiver 9 kHz to 30 MHz
- 7010/03: EMI Receiver 9 kHz to 3 GHz
- 9010: EMI Receiver 10 Hz to 30 MHz
- 9010F: EMI Receiver 10 Hz to 30 MHz
- 9010/03P: EMI Receiver 10 Hz to 300 MHz
- 9010/30P: EMI Receiver 10 Hz to 3 GHz
- 9010/60P: EMI Receiver 10 Hz to 6 GHz
- FR4003: Field Receiver 9 kHz to 30 MHz

Sales: Via Leonardo da Vinci, 21/23 20090 Segrate (Milano) - ITALY Phone: +39 02 2699871 Fax: +39 02 26998700

### LISNs

- L2-16B: single phase AMN, 16 A
- L3-32: 4 lines, 3-phase AMN, 32 A
- L3-64: 4 lines, 3-phase AMN, 63 A
- L3-64/690: 4 lines, 3-phase AMN, 63A
- L3-100: 4 lines, 3-phase AMN, 100 A
- L1-150M: single-path, 50 Ohm AMN, 150 A
- L1-150M1: single-path, 50 Ohm AMN, 150 A
- L1-500: single phase AMN, 500A
- L3-500: 4 lines, 3-phase AMN, 500 A
- L2-D: Delta LISN for telecom, 2 A, 150  $\Omega$



E-Mail: nardait.support@L3T.com

Internet: www.narda-sts.it

#### **RFI Filters**

- FIL-L2-16F: single phase RFI Filter, 16 A
- FIL-L2-24M: single phase RFI Filter, 24 A
- FIL-L3-32M: 3-phase+neutral RFI Filter, 32 A
- FIL-L3-70M: 3-phase+neutral RFI Filter, 70 A

Headquarters: Via Benessea, 29/B 17035 Cisano sul Neva (SV) - ITALY Phone: +39 0182 58641 Fax: +39 0182 586400