CISPR 22 ISN Two Balanced Pair Module

Per CISPR 22 (2005), ISN's are specialized coupling decoupling devices used for measuring the conducted asymmetric common mode radio interference voltages of ITE. FCC-TLISN-T4-02-09 ISN has been designed to perform conducted emissions test per CISPR 22 on two balanced pair telecom lines. It meets the requirements for Longitudinal Conversion Loss defined in CISPR 22, Ed.5, 2005, accepted by CISPR.

TECHNICAL DATA

Common mode impedance and phase angle

F=150 kHz to 30 MHz
Impedance: 150 ± 20Ω
Phase: 0 ± 20°

Connectors

RF I/O:	50Ω BNC female
EUT:	D-sub 25 female
AE:	D-sub 25 female

Transmission Bandwidth of Differential Signal (Symmetrical Signal) EUT-AE

150 kHz – 1 MHz	<0.20 dB
10 MHz	<0.50 dB
30 MHz	<3.00 dB

Decoupling of common mode disturbance: Attenuation from RF Output to AE Port

150 kHz	>35 dB
1.5 MHz	>55 dB
30 MHz	>55 dB

Voltage Division Factor (VDF)

9.5 dB ±1 dB
This VDF to be added to reading of measuring receiver
(Measure between RF I/O and LCL adapter Port)

Intentional Signal Parameter

AC Voltage	< 63 V rms
DC Voltage	< 100 V
Current	< 250 mA
Test Voltage	< 220 V dc

Longitudinal Conversion Loss (LCL) EUT

Frequency
150 kHz – 30 MHz

CAT 5: $LCL\ (dB) = 65 - 10\log_{10}[1 + (f/5)^2]$ dB
± 3 dB for f < 2 MHz, -3dB / +4.5 dB for f between 2 MHz and 30 MHz)
CAT 3: $LCL\ (dB) = 55 - 10\log_{10}[1 + (f/5)^2]$ dB **(± 3 dB)**

General Data

Size (W x H x D):	100 x 100 x 235 mm
Weight:	1.0 kg
Operating Temperature:	+17° C to 29°
Relative humidity:	up to 80%

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