

# CISPR 22 ISN Two Balanced Pair Module

Per CISPR 22 (1998), ISN's are specialized coupling decoupling devices used for measuring the conducted asymmetric common mode radio interference voltages of ITE. FCC-TLISN-T4-02 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 I/11/CDV, accepted by CISPR.



## Specifications

Specification Frequency 150 kHz - 30 MHz  
Useable Frequency 9 kHz - 230 MHz

Connectors  
 Basic Network D-sub 25 pin  
 LC Adapters RJ11 and RJ45

Common Mode Impedance  
 9 kHz - 100 MHz 150Ω ±20Ω  
 100 MHz - 230 MHz 105Ω ±210Ω

Phase Angle  
 9 kHz - 30 MHz 0°±20°

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

9 kHz - 1 MHz <.20dB  
 10 MHz <.25dB  
 30 MHz <.50dB  
 100 MHz <3.0dB

### Decoupling Common Mode Attenuation RF Output Port to AE

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

### Crosstalk EUT/AE Pair 1 to Pair 2

150 kHz >74dB  
 1.5 MHz >60dB  
 30 MHz >40dB  
 100 MHz >30dB

### Voltage Division Factor (Common Mode)

Basic Network Measured between the RF Output Port and the EUT Port Factor to be added to the reading of the measuring receiver -- Typically 9.5 dB ±1dB

### Intentional Signal Parameter

AC Voltage <63 VRMS  
 DC Voltage <100 V  
 Current <.25Amperes  
 Test Voltage <220 VDC

### Longitudinal Conversion Loss EUT

Frequency	Basic Network	CAT6	CAT5	CAT3
150 kHz	>85dB	75dB	65dB	55dB
1.5 MHz	>85dB	75dB	65dB	55dB
5 MHz	>70dB	72 ±3	62 ±3	52 ±3
10 MHz	>64dB	68 ±3	58 ±3	48 ±3
20 MHz	>58dB	63 ±3	53 ±3	43 ±3
30 MHz	>55dB	59 ±3	49 ±3	39 ±3



## Fischer Custom Communications, Inc.

20603 Earl St., Torrance, CA 90503 • Phone: (310) 303-3300 • Fax (310) 371-6268  
 E-mail: Sales@Fischercc.com • www.fischercc.com

©2002 Fischer Custom Communications, Inc.

0208DS-FCC-TLISN-T4-02

All rights reserved • Printed in USA

FCC-TLISN-T4-02