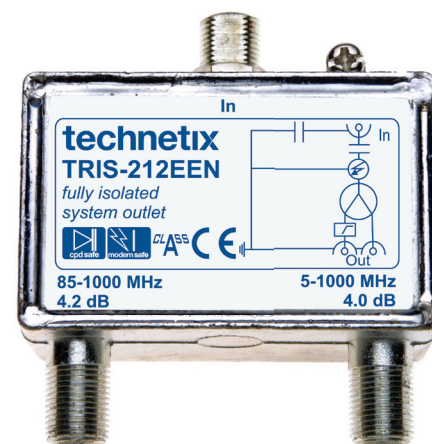


## TRIS-212EEN fully isolated wall outlet



- **Dual output isolator**
- **Modem Safe™ surge protection and intermodulation reduction solution**
- **CPD Safe™ - silver plated, zinc die-cast and NiSn plated, machined brass input connector with silver plated F-inner spring**
- **Diplex filters for low loss**
- **Good intermodulation performance**
- **Low leakage current**



### Overview

Isolators (frequently referred to as system outlets) are used to separate in-home installations or subscriber equipment from the CATV network. They prevent hazardous voltages from being transferred to in-home installations.

Technetix supplies two main types of isolator - fully and semi-isolated system outlets. The TRIS series comprises fully isolated system outlets developed to meet the needs of the European market. They incorporate high voltage capacitors that provide isolation to both the inner and the outer conductors of the coaxial connectors. There are a variety of one, two and three port isolators in the TRIS series as well as many accessories such as ABS housings, adaptor plates and push-on filters.

The TRIS-212EEN dual output isolator has a silver plated, zinc die-cast housing and a NiSn plated, machined brass input connector. The inner spring of the connector has been designed to accept coax cables with an inner conductor of between 0.51 and 1.20 mm. It retains this elasticity and provides effective clamping force even when varying thicknesses of inner conductor are connected in succession.

#### Modem Safe

Modem Safe is a highly effective surge protection solution for sensitive network and in-home CPE. Based on passive circuits, the technology does not rely on discharge tubes, extending the lifespan of the solution.

- Blocks high and low voltage pulses and unwanted DC voltages
- Prevents internal ferrites within the product from becoming magnetised (avoiding deterioration in the performance of CPE)
- Drives fewer reported faults
- Improves customer service
- Reduces truck rolls

#### CPD Safe

CPD (Common Path Distortion) is well known for producing signal interference on networks. It is caused by electrolytic corrosion or the oxidation of dissimilar metals when in close contact. CPD Safe technology protects against CPD:

- Removes a primary cause of CPD
- Reduces signal interference on the network
- Drives fewer reported faults
- Reduces truck rolls
- Improves customer service

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## Specifications

		MHz	Min	Typ	Max	Remarks
Equipment passband		5 - 1000				All specifications are measured at room temperature
Insertion loss (dB)	In -> Data	5 - 10	3.4	3.9	4.4	Operating frequency range 10 to 1000 MHz
		10 - 470	3.0	3.5	4.0	1 Test methods for frequencies according to EN 50083-2 2006.
		470 - 862	3.4	4.0	4.6	Operating frequency ranges: 10-1000 MHz according to IG 56620 01
		862 - 1000	3.7	4.3	4.9	2 Tested according to EN 60728-11 2005
	In -> HPF	5 - 65	22.0			3 Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60dBmV, before surge
		87.5 - 470	3.3	3.8	4.3	4 Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60dBmV, after 10 pulses (25 V/1.2 $\mu$ s rise time/500 $\mu$ s duration) at input port
		470 - 862	3.4	4.2	5.0	5 Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60dBmV, after 1 pulse (1 kV 1.2 $\mu$ s/50 $\mu$ s, IEC 61000-4-5 2005 level 2) at input port
		862 - 1000	4.0	4.8	5.6	6 Tested according to IEC 61000-4-5 2005
Return loss (dB, min)	In	5 - 10	20.0			7 Additional protection via Modem Safe circuit allows a maximum output of 35 V
		10 - 60	20.0			
		87.5 - 1000	20.0			
	HPF Data	5 - 40	20.0			8 F-spring test pin acceptance 0.51mm min to 1.2mm max
		40 - 1000	20.0			
Isolation (dB, min)	HPF -> Data	5 - 60	50.0			
		60 - 65	45.0			
		87.5 - 862	22.0			
		862 - 1000	18.0			
Screening efficiency (dB, min) <sup>1</sup>		8 - 10	70.0			
		10 - 12	80.0			
		12 - 300	85.0			
		300 - 470	80.0			
		470 - 1000	75.0			
Galvanic isolation 2120 V DC (mA, max) <sup>2</sup>	Inner (input) - Inner (output)	0.7				
	Outer (input) - Outer (output)	0.7				
Galvanic isolation 230 V AC (mA, max) <sup>2</sup>	Inner (input) - Inner (output)	2.0				
	Outer (input) - Outer (output)	2.0				
Intermodulation p+q (dB, min)	No surge <sup>3</sup>	-115.0				
	25 V surge <sup>4</sup>	-115.0				
	1 kV surge <sup>5</sup>	-115.0				
Surge Class conformance <sup>6,7</sup>		1 kV 1.2/50 $\mu$ S				
Connectors <sup>8</sup>	All ports	F-female				
Material	Housing	NiSN plated zinc die-cast				
	F-spring	Silver plated beryllium copper				
Impedance (Ohm, typ)		75				
Dimensions (mm)	L x H x D	60.0x38.0x30.0				
Equipment approval	CE					

### Ordering information

Item Name	Article number
TRIS-212EEN	10460174

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