

TRIS-1002L fully isolated wall outlet



- **Single output isolator**
- **Modem Safe™ surge protection and intermodulation reduction solution**
- **CPD Safe™ - Nickel plated, zinc die-cast housing and tin-nickel plated, machined brass input connector with silver plated F-inner spring**
- **Excellent RF performance**
- **Exceeds EN Class A screening requirements**
- **Low insertion loss**
- **Low leakage current**
- **Compact design**



Overview

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

Technetix supplies two major 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-1002L single output isolator has a nickel plated, zinc die-cast housing and a tin-nickel plated, machined brass input connector. The material of the inner spring has been designed specially for connecting coax cables with an inner core 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 -> Out	0.3 - 1	20			Operating frequency range 10 to 1000 MHz
		5 - 10	0.0	0.3	0.6	1 Test methods for frequencies according to EN 50083-2 2006. Operating frequency ranges: 10-1000 MHz according to IG 56620 01
		10 - 40	0.0	0.2	0.4	2 Tested according to EN 60728-11 2005
		40 - 470	0.0	0.2	0.4	3 Two carriers (60 and 65 MHz) output to output @ 120 dBμV/60dBmV, before surge
		470 - 862	0.1	0.4	0.7	4 Two carriers (60 and 65 MHz) output to output @ 120 dBμV/60dBmV, after 10 pulses (25 V/1.2μs rise time/500μs duration) at input port
		862 - 1000	0.1	0.4	0.7	5 Two carriers (60 and 65 MHz) output to output @ 120 dBμV/60dBmV, after 1 pulse (1 kV 1.2μs/50μs, IEC 61000-4-5 2005 level 2) at input port
Return loss (dB, min)	All ports	5 - 50		20.0		6 Tested according to IEC 61000-4-5 2005
		50 - 1000		18.0		7 Additional protection via Modem Safe circuit allows a maximum output of 35 V
Screening efficiency (dB, min) ¹		8 - 10		70.0		8 F-spring test pin acceptance 0.51mm min to 1.2mm max
		10 - 12		80.0		
		12 - 300		85.0		
		300 - 470		80.0		
		470 - 1000		75.0		
Galvanic isolation 2120 V DC (mA, max) ²	Inner (input) - Inner (output)		0.2			
	Outer (input) - Outer (output)		0.2			
Galvanic isolation 230 V AC (mA, max) ²	Inner (input) - Inner (output)		2.0			
	Outer (input) - Outer (output)		2.0			
Intermodulation p+q (dB, min)	No surge ³		-120.0			
	25 V surge ⁴		-120.0			
	1 kV surge ⁵		-120.0			
Surge Class conformance ^{6,7}			1 kV 1.2/50μS			
Connectors ⁸	All ports		F-female			
Material	Housing		Nickel plated zinc die-cast			
	F-spring		Silver plated beryllium copper			
Impedance (Ohm, typ)			75			
Dimensions (mm)	L x H x D		60.0x38.0x20.0			
Equipment approval	CE					

Ordering information

Item Name	Article number
TRIS-1002L	19002917

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