

- Single output isolator
- 1.2 GHz
- 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 main types of isolator - fully and semi-isolated system outlets. The TRISX 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 TRISX series as well as many accessories such as ABS housings, adaptor plates and push-on filters.

The TRISX-1002 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

## Specifications

Characteristic	Port type	MHz	Min	Typ	Max	Unit	Notes
Equipment passband		5-1218					
Insertion loss	In to out	0.3 - 1	20			dB	
		5 - 10			0.6	dB	
		10 - 470		0.3	0.4	dB	
		470 - 862		0.5	0.7	dB	
		862 - 1218		0.6	0.9	dB	
Return loss	All ports	5 - 10	18			dB	
		10 - 50	20			dB	
		50 - 1000	18			dB	
		1000 - 1218	16			dB	
Screening efficiency		10 - 30		95		dB	1
		30 - 300		95		dB	1
		300 - 470		90		dB	1
		470 - 950		85		dB	1
		950 - 1006		85		dB	1
		1006 - 1218		85		dB	1
Galvanic isolation 2120 V DC (max)	Inner (input) - Inner (output) Outer (input) - Outer (output)		0.2			mA	2
Galvanic isolation 230 V AC (max)	Inner (input) - Inner (output) Outer (input) - Outer (output)		2.0			mA	2
Intermodulation p+q (min)	No surge		-120			dB	3
	25 V surge		-120			dB	4
	1 kV surge		-120			dB	5
Surge Class conformance			1 kV 1.2/50 $\mu$ S				6,7
Connectors	All ports		F-female				8
Material	Housing		Nickel plated zinc die-cast				
	F-spring		Silver plated beryllium copper				
Impedance (typ)			75			$\Omega$	
Dimensions			60x38x20			mm	
Equipment approval			CE				

## Notes

	All specifications are measured at room temperature
	Operating frequency range 10 to 1218 MHz
1	Test Method for frequencies according to EN50083-2 2012 Operating frequency ranges: 10-1218 MHz according to IG 56620 01
2	Tested according to EN 60728-11 2005
3	Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60 dBmV, before surge
4	Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60 dBmV, after 10 pulses (25 V/1.2 $\mu$ s rise time/500 $\mu$ s duration) at input port, tested according to IEC 60728-4
5	Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60 dBmV, after 1 pulse (1 kV 1.2 $\mu$ s/50 $\mu$ s, IEC 61000-4-5 2005 level 2) at input port, tested according to IEC 60728-4
6	Tested according to IEC 61000-4-5 2005
7	Additional protection via Modem Safe circuit allows a maximum output of 35 V
8	F-spring test pin acceptance 0.51mm min to 1.2mm max
9	Additional protection via Modem Safe circuit allows a maximum output of 35 V

## Order information

Item number	Item code	Description
19008921	TRISZ-1002	ISOLATOR DOUBLE GALVANIC 1 PORT F-F F-F 5-1218MH