

- Dual output isolator
- Technetix Modem Safe® surge protection and intermodulation reduction solution
- Technetix CPD Safe™ - white bronze plated, zinc alloy casing 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 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-2002 dual output isolator has a white bronze plated, zinc alloy casing and a NiSn plated, machined brass input connector.

## Technetix Modem Safe®

Technetix 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 magnetized (avoiding deterioration in the performance of CPE)
- Drives fewer reported faults
- Improves customer service
- Reduces truck rolls

## Technetix CPD Safe™

CPD (Common Path Distortion) is well known for producing signal interference on networks. It is caused by electrolytic corrosion or the oxidization of dissimilar metals when in close contact. Technetix 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					1
Insertion loss	In to out 1 and out 2	5-10	3.3	4.1	4.5	dB	
		10-470	3.3	3.8	4.3	dB	
		470-862	3.3	4.0	4.7	dB	
		862-1000	3.3	4.3	5.0	dB	
		1000-1218	3.3	4.6	5.3	dB	
Return loss	In / Out	5-10	18			dB	2
		10-40	20			dB	2
		40-1000	20			dB	2
		1000-1218	14			dB	2
Isolation	Out -> Out	5-10	20			dB	3
		10-65	35			dB	3
		65-1000	26			dB	3
		1000-1218	20			dB	3
Screening efficiency		10-12	80			dB	4
		12-30	85			dB	4
		30-300	85			dB	4
		300-470	80			dB	4
		470-1218	75			dB	4
Galvanic isolation 2120 VDC (max.)	Inner (input) - Inner (output) Outer (input) - Outer (output)		0.7			mA	5
Galvanic isolation 230 VDC (max.)	Inner (input) - Inner (output) Outer (input) - Outer (output)		2.0			mA	5
Intermodulation p+q (min.)	No surge		-115			dB	6
	25 V surge		-115			dB	7
	1 kV surge		-115			dB	8
Surge Class conformance	In		1 kV 1.2/50 $\mu$ S				9,10
Connectors	All ports		F-female				
Material	Housing		White bronze plated zinc diecast				
	F-spring		Silver plated beryllium copper				
Impedance (typ.)			75			$\Omega$	
Dimensions	L x H x D		60 x 38 x 20			mm	
Equipment approval			CE				

**Notes**

	All specifications are measured at room temperature.
1	Operating frequency range 10-1218 MHz.
2	Where frequency is above 40 MHz, deduct 1.5 dB/Octave, with a minimum of 14 dB.
3	Where frequency is above 40 MHz, deduct 1.5 dB/Octave.
4	Test methods for frequencies according to EN 50083-2 2012.
5	Tested according to BS EN 60728-11:2010.
6	Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60 dB $\mu$ V, before surge.
7	Two carriers (60 and 65 MHz) output to output @ 120 dB $\mu$ V/60 dB $\mu$ V, after 10 pulses (25 V/1.2 $\mu$ s rise time/500 $\mu$ s duration) at all ports.
8	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 BS EN 61000-4-5:2014 level 2) at input port.
9	Tested according to IEC BS EN 61000-4-5:2014.
10	Additional protection via Modem Safe circuit allows a maximum output of 35 V.

**Order information**

Item code	Model code	Description
19010382	TRISX-2002	ISOLATOR DOUBLE GALVANIC 2 PORT F-F F-F 5-1218 MHz