

- 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

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

Remarks

	All specifications are measured at room temperature
	Operating frequency range 10 to 1218MHz
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 dBµV/60dBmV, before surge
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, tested according to IEC 60728-4
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, 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
10	F-spring test pin acceptance 0.65mm min to 1.1mm max

Ordering information

Item Name	Article number
TRISX-1002	19010381