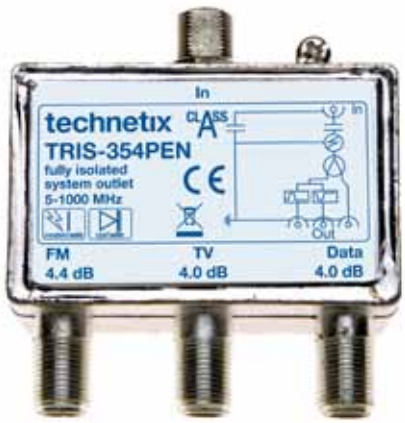
TRIS-354PEN fully isolated wall outlet

- **Three output isolator - FM/TV/data**
- **Modem Safe™ surge protection and intermodulation reduction solution**
- **CPD Safe™ - nickel 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 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-354PEN three output isolator has a nickel plated, zinc alloy casing 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 oxidisation 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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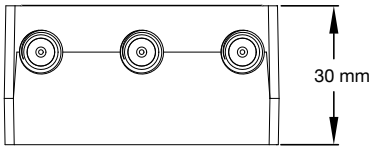
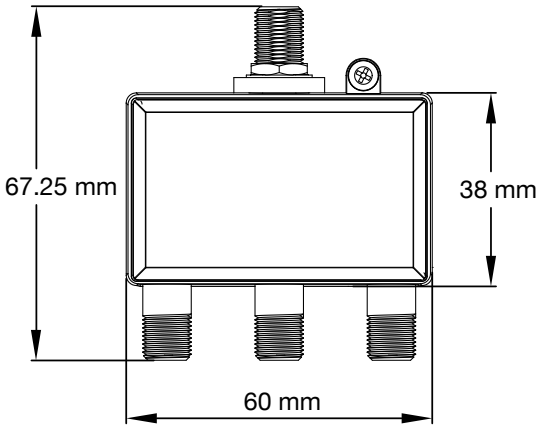
Specifications

		MHz	Min	Typ	Max
Equipment passband[1]		5 - 1000			
Insertion loss (dB)	In -> TV	5 - 70	3.6	4.1	4.6
		120 - 130	3.6	4.1	4.6
		130 - 470	3.3	3.8	4.3
		470 - 862	3.5	4.0	4.5
		862 - 1000	3.8	4.3	4.8
	In -> R	87.5 - 108	3.4	4.4	5.4
	In -> Data	5 - 10	3.6	4.1	4.6
		10 - 470	3.3	3.8	4.3
		470 - 862	3.5	4.0	4.5
		862 - 1000	3.8	4.3	4.8
Return loss (dB)[2]	In	5 - 70	20.0		
		87.5 - 108	14.0		
		120 - 1000	20.0		
	TV	5 - 70	20.0		
		120 - 1000	20.0		
	Data	5 - 40	20.0		
		40 - 1000	20.0		
	R	87.5 - 108	14.0		
Isolation (dB) [2]	TV -> R	5 - 70	22.0		
		87.5 - 108	15.0		
		120 - 130	15.0		
		130 - 150	25.0		
		150 - 862	40.0		
		862 - 1000	35.0		
	R -> Data	5 - 70	40.0		
		87.5 - 108	30.0		
		120 - 1000	40.0		
	TV -> Data	5 - 10	22.0		
		10 - 65	35.0		
		65 - 1000	26.0		
Screening efficiency (dB)[3]		8 - 10	70.0		
		10 - 12	80.0		
		12 - 300	85.0		
		300 - 470	80.0		
		470 - 1000	75.0		
Group Delay ΔF=4.43 MHz		10 - 70		10 ns	
		120 - 1000		10 ns	
Galvanic isolation 2120 V DC (mA, max)[4]	Inner (input) - Inner (output) Outer (input) - Outer (output)	0.2			
Galvanic isolation 230 V AC (mA, max)[4]	Inner (input) - Inner (output) Outer (input) - Outer (output)	2.0			
Intermodulation p+q (dB, min)	No surge[5]	-115.0			
	25 V surge[6]	-115.0			
	1 kV surge[7]	-115.0			
Surge Class conformance[8, 9]		1 kV 1.2/50µS			
Connectors[10]	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	60.0x38.0x30.0			
Equipment approval	CE				

Remarks

	All specifications are measured at room temperature
1	Operating frequency range 10 to 1000 MHz
2	Where frequency is above 40 MHz, deduct 1.5 dB/Octave
3	Test methods for frequencies according to EN 50083-2 2006. Operating frequency ranges: 10-1000 MHz according to IG 56620 01
4	Tested according to EN 60728-11 2005
5	Two carriers (60 and 65 MHz) output to output @ 120 dBµV/60dBmV, before surge
6	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
7	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
8	Tested according to IEC 61000-4-5 2005
9	Additional protection via Modem Safe circuit allows a maximum output of 35 V
10	F-spring test pin acceptance 0.51mm min to 1.2mm max





Ordering information

Item Name	Article number
TRIS-354PEN	10460178