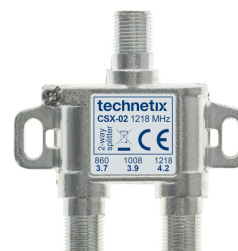


## Installation taps and splitters

### 2-way 1.2 GHz Core-series in-line splitter

**technetix**

- High-quality installation splitter
- Modem Safe® surge protection
- CPD Safe™ corrosion protection
- Compact, white bronze plated housing
- Optional 7mm cable-bridge available



#### Overview

The Core series is our next generation of installation passives which excel in both electrical and mechanical performance. Though designed for indoor use, they are also specified for use in street-side plant due to their IP68 rating. The products are easy to install with a compact housing, specifically sized to make replacement and upgrade installation simple.

All F-connector contacts meet BS EN IEC 61169-24:2019 standards. The inner spring has been designed to accommodate a wide range of coax cables with an inner core of 0.64 to 1.30mm. It retains its elasticity and provides superior clamping forces, even when varying thicknesses of inner conductor are connected in succession.

Intermodulation performance, which is an important factor in high-level return path signals, has been greatly improved through a newly developed ferrite and specially designed circuits.

The screening effectiveness meets the Class A++ requirements defined in BS EN 50083-2:2012 across the whole frequency range from 12 to 1218 MHz.

#### Technetix Modem Safe®

Technetix Modem Safe® is a highly effective surge protection solution for sensitive network and in-home CPE. This technology is based on passive circuits and is not reliant on discharge tubes, therefore 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, improving customer service and reducing truck rolls

#### Technetix CPD Safe™

Common Path Distortion (CPD) is well known for producing signal interference in the network. It is caused by electrolytic corrosion or the oxidation of dissimilar metals when in close contact. Technetix CPD Safe™ technology protects against CPD.

- Removes a primary cause of CPD
- Reduces signal interference in the network
- Drives fewer reported faults, improving customer service and reducing truck rolls

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### Specifications

Parameter	Port(s)	Frequency	Min	Typ	Max	Units	Notes	Details
Insertion loss	In - Outs	12 - 550			3.7	dB		
		550			3.7	dB	4	
		1218			4.4	dB	4	
Return loss	All Ports	10 - 47	20.0			dB		
		47 - 1218	20.0			dB		
Isolation	Out - Out	12 - 47	30.0			dB		
		47 - 550	32.0			dB		
		550	32.0			dB	4	
		1218	22.0			dB	4	
Intermodulation p+q	No Surge				122.0	dBc		
	10 x 25V				115.0	dBc	1	
	+/-1kV				115.0	dBc	1	
Surge withstand	+/-1000V					V	2, 6	
Screening efficiency		5 - 12	5.0			mOhm/m	3	
		12 - 30	2.5			mOhm/m	3	
		30 - 1000	105.0			dBc	3	
		1000 - 2000	95.0			dBc	3	
Frequency range		12 - 1218				MHz		
Impedance				75.0		Ohm		
DC Power blocking								All ports
Operating temperature range			-15.0		45.0	°C	6	
Storage temperature range			-40.0		60.0	°C		
Connectors	All ports							F-female
Material	Housing							Die cast zinc alloy, white bronze plated
	Lid							Mild steel, tin plated
	F-spring							Beryllium copper, silver plated
	Grounding block							Will accommodate 2 x 2.5mm <sup>2</sup> conductors
Dimensions	L x H x D		54.0	55.0	16.0	mm		
Equipment approval								CE

## Installation taps and splitters

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### Specifications

Parameter	Port(s)	Frequency	Min	Typ	Max	Units	Notes	Details
Water Immersion	BS EN 60529:1992							IP68, 1-meter immersion 1-week duration with all ports terminated
Salt Fog	BS EN 60068-2-52:2018 [test Kb] Salt mist cyclic							Test Method 4 (14 Days)
Drop test	BS EN 60068-2-31:2008 [tests Ec] Rough handling shocks.						7	The unpackaged device under test (DUT) must be able to withstand a 1000mm drop from 2 planes (top & bottom) using a drop tester. Device shall survive and continue to operate
High temperature cycling	BS EN 60068-2-14:2000 [test N] Change of temperature							6 cycles of: 3 hrs at the low limit 5°C, 1hr transition to high limit +40°C at 95% RH, wait 3 hrs then 1 hr transition to low limit. The device shall continue to operate during and after test.
Temp Cycling with Humidity	BS EN 60068-2-30:2005 [test Db] Damp heat cyclic (12hr + 12hr)							55°C, 6 cycles, 95% RH
Temperature	BS EN 60068-2-2:2007 [test B] Dry heat							85°C, 72 hrs
Vibration	BN EN 60068-2-6:2008 [test Fc] Vibration [sinusoidal]							The sample shall be subjected to a constant displacement amplitude test with an amplitude of 0.15mm or 20 m/s <sup>2</sup> , the frequency varying exponentially with time from 10 Hz and 150 Hz and back. One cycle taking 5 mins. Test duration 10 cycles in each of the 3

### Notes

- 1 Two carriers (60 & 65 MHz), out to out, @ 120 dBuV after 10 pulses (25 V/1.2 uS rise time / 500 uS duration) at all ports.  
Two carriers (60 & 65 MHz), out to out, @ 120 dBuV after 1x positive and 1x negative pulses (1 kV/1.2 uS rise time / 50 uS fall time) at all ports.  
Two carriers (60 & 65 MHz), out to out, @ 120 dBuV after activation of a 50 kg force magnet over any port.
- 2 Surge pulse 1 kV/1.2 uS rise time / 50 uS fall time (IEC61000-4-5:1995) 2 Ω source impedance (1x positive and 1x negative).
- 3 IEC 62153-7 § 5.5, IEC 60728-2 and EN-50083 (transfer impedance method, absorbing clamp).

### Ordering information

Item name	Article number
CSX-02	19012810

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#### Notes

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4	Linear point to point limit line.
5	@47 MHz - 1.5 dB per octave not exceeding 18 dB
6	0.5 dB degradation in insertion loss and 2 dB degradation in return loss and isolation permissible.
7	0.5dB degradation in insertion loss and 3 dB degradation in return loss and isolation permissible.

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