

## 1.2 GHz narrowcast combiner / splitter



- 1.2 GHz headend tap and splitter in a single housing
- Offering a high isolation passive solution to combine narrowcast and broadcast signals
- Designed for panel mounting in headend applications
- Saves rack space and easy to install
- Exceeds EN class A screening requirements



### Overview

The HSXTX-02 is a high quality combiner, splitter in a single housing which has been developed specifically to combine both the narrowcast and broadcast feeds. The two way splitter on the output of this combined feed allows the customer to feed two optical transmitters. This will allow up to 40 optical transmitters to be fed from 1RU of rack space.

Designed for panel mounting in headend applications, providing a versatile solution to support many different headend solutions.

The product is designed with a connector spacing suitable for use with the Technetix HPP-xxxF series of 19" 1RU, 1.5RU, 2RU and 3RU mounting panels.

### Construction

- Tough, easy to install housing
- Fitted with superior tin-nickel plated, brass bodied connectors. Once tightened they stay tight, as there is no cold-flow that you get in zinc die-cast connectors
- Epoxy sealed tongue and groove back cover
- F-connector inner spring designed for connecting coaxial cables with an inner conductor of 0.64 mm to 1.14 mm (IEC 61169-24:2019) - it retains this elasticity, providing effective clamping force even when varying thicknesses of inner conductor are connected in succession

### EN class A screening

High frequency shielding used on this product exceeds class A requirements (EN 50083 2:2012) across the whole frequency range from 5 MHz to 1218 MHz.

### 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

## Electrical specifications

Parameter	Attribute	Frequency	Min	Typ	Max	Units	Notes
Insertion loss	NC - Out	12	3.7	4.8	5.7	dB	6
		1218	5.2	6.6	7.2	dB	6
	BC - Out	12-1218	11.7	12.5	13.7	dB	
Return loss	All ports	12-30	18.0			dB	
		30-1000	20.0			dB	1
		1000-1218	15.0			dB	
Isolation	Out - Out	12 - 30	24.0			dB	
		30 - 862	26.0			dB	1
		862-1218	20.0			dB	
	NC-BC	12-1218	28.0			dB	
Intermodulation p+q	No surge		-122.0			dBc	2
	25V surge		-115.0			dBc	3
	1kV surge		-105.0			dBc	4
Surge withstand	All ports	1.2µs/50µs			1.0	kV	5
Screening efficiency		5 - 300	85.0			dB	
		300 - 470	80.0			dB	
		470 - 950	75.0			dB	
		950 - 1218	55.0			dB	
Frequency range		12 - 1218				MHz	
Impedance				75.0		Ohm	

## Environmental specifications

Parameter	Attribute	Min	Max	Units	Notes
Operating temperature range		0.0	45.0	°C	7
Storage temperature range		-20.0	85.0	°C	

## Mechanical specifications

Parameter	Attribute	Min	Typ	Max	Units	Details
Connectors	All ports					F-female
Material	Housing					Die cast zinc alloy, tin-nickel plated
	F-spring					Beryllium copper, tin-nickel plated
	F-body					Tin-nickel plated brass
Dimensions	L x H x D	41.0	19.0	41.0	mm	

**1.2 GHz narrowcast combiner / splitter****General specifications**

Parameter	Attribute	Details
Equipment approval		CE and UKCA

**Notes**

1	F > 47 MHz -1.5 dB/oct always >15 dB return loss, 20 dB isolation
2	Two carriers (60 and 65 MHz) any port to any port @ 120 dB $\mu$ V/60 dBmV, before surge
3	Two carriers (60 and 65 MHz) any port to any port @ 120 dB $\mu$ V/60 dBmV, after 10 pulses (25 V/1.2 $\mu$ s rise time/500 $\mu$ s duration) at all ports
4	Two carriers (60 and 65 MHz) any port to any port @ 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, 2 Ohm source) at all ports
5	Tested according to IEC 61000-4-5 2005, 2 Ohm source Insertion loss deviation of 0.5 dB from specification permitted Isolation and return loss deviation of 2.0 dB from specification permitted
6	Linear point to point limit line
7	Tolerance over temperature: Insertion loss deviation of 0.5 dB from specification permitted Isolation and return loss deviation of 2.0 dB from specification permitted

**Ordering information**

Item name	Article number
HSXTX-02	19013623