

LH100 1.2 GHz series (LHSx / LHCx / LHIx)

Remotely power any Technetix amplifier on the coaxial cable when no power supply is conveniently located.

Technetix' 100-series hardline passives deliver reliable DOCSIS® 3.1 supported frequencies to 1.2 GHz. MSOs benefit from low insertion losses and superior electrical and mechanical performances, increasing network reliability and service quality to their demanding customers.

The 100-series hardline passives are available in configurations including directional couplers (DCs), balanced and unbalanced splitters, and power inserters. These 2-way, AC power-passing, outdoor hardened devices are 6 kV surge protected, 15 PSI pressure tested, and are enclosed in a polyurethane coated 360 aluminum alloy housing, complete with stainless steel hardware. Line passives come with a hinged lid for non-disruptive service and design configuration. Standards-compliant line passives come with high current power coils and shorting bars for power grid configurations to block or pass power.



LHS102 1.2 GHz
(front angled view)

FEATURES

- Support DOCSIS 3.1 bandwidth 5-1220 MHz
- 20 A current capacity
- 6 kV surge protection
- Low insertion loss
- 15 PSI pressure withstand
- Polyurethane coated, 360 aluminum alloy housing
- Separate gaskets for weatherproofing & RFI integrity
- Shorting bars to disable power
- Non-destructive connector pin mechanism
- Strand & pedestal mounting
- SCTE standards-compliant

SPECIFICATIONS

Parameter	Specification						
	LHS102	LHS103	LHC108	LHC112	LHC116	LHI100	LHI116
Insertion Loss (-dB Max.) ⁽¹⁾							
5 MHz	3.8	3.8	2.2	1.3	1.2	0.4	1.2
10 MHz	3.8	3.8	2.2	1.3	1.2	0.4	1.2
30 MHz	3.8	3.8	2.2	1.3	1.2	0.4	1.2
50 MHz	3.9	3.8	2.2	1.3	1.2	0.4	1.2
100 MHz	3.9	3.8	2.2	1.3	1.2	0.5	1.2
300 MHz	4.0	4.2	2.3	1.4	1.3	0.6	1.3
450 MHz	4.1	4.3	2.4	1.5	1.3	0.7	1.3
550 MHz	4.2	4.4	2.4	1.6	1.3	0.7	1.3
650 MHz	4.2	4.5	2.5	1.7	1.3	0.7	1.3
750 MHz	4.3	4.6	2.5	1.7	1.4	0.8	1.4
860 MHz	4.4	4.7	2.6	1.9	1.4	0.8	1.4
1000 MHz	4.8	5.0	2.8	2.2	1.6	0.9	1.8
1220 MHz	5.5	6.8	3.5	3.3	2.3	1.4	2.5
Tap Loss (-dB Max.) ⁽¹⁾							
5 MHz	3.8	7.2	9.3	12.4	16.4	--	16.4
10 MHz	3.8	7.2	9.3	12.4	16.4	--	16.4
30 MHz	3.8	7.1	9.3	12.4	16.4	--	16.4
50 MHz	3.9	7.1	9.3	12.4	16.4	--	16.4
100 MHz	3.9	7.1	9.3	12.4	16.4	--	16.4
300 MHz	4.0	7.2	9.3	12.4	16.4	--	16.4

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SPECIFICATIONS CONT'D.

Parameter	Specification						
	LHS102	LHS103	LHC108	LHC112	LHC116	LHI100	LHI116
Tap Loss (-dB Max.) ⁽¹⁾							
450 MHz	4.1	7.4	9.3	12.4	16.4	--	16.4
550 MHz	4.2	7.5	9.3	12.4	16.4	--	16.4
650 MHz	4.2	7.6	9.3	12.6	16.4	--	16.4
750 MHz	4.3	7.8	9.3	12.6	16.5	--	16.5
860 MHz	4.4	8.2	9.3	12.6	16.6	--	16.7
1000 MHz	4.8	8.9	9.5	12.6	16.7	--	16.8
1220 MHz	5.5	10.3	10.0	12.6	17.3	--	16.8
Isolation (Out-Tap) (-dB Min.)							
5 MHz	20.0	22.0	19.0	27.0	27.0	--	29.0
10 MHz	28.0	32.0	25.0	27.0	40.0	--	42.0
30 MHz	30.0	32.0	28.0	32.0	40.0	--	42.0
50 MHz	30.0	32.0	28.0	30.0	40.0	--	42.0
100 MHz	27.0	25.0	28.0	28.0	36.0	--	39.0
300 MHz	23.0	25.0	25.0	25.0	28.0	--	34.0
450 MHz	22.0	24.0	23.0	23.0	27.0	--	32.0
550 MHz	22.0	24.0	21.0	22.0	27.0	--	31.0
650 MHz	21.0	24.0	20.0	21.0	27.0	--	30.0
750 MHz	20.0	24.0	18.0	20.0	26.0	--	29.0
860 MHz	20.0	22.0	17.0	19.0	25.0	--	28.0
1000 MHz	20.0	22.0	16.0	17.0	20.0	--	26.0
1220 MHz	19.0	20.0	16.0	17.0	20.0	--	23.0
Isolation (AC-RF) (-dB Min.)							
5 MHz	--	--	--	--	--	60.0	60.0
10 MHz	--	--	--	--	--	64.0	64.0
30 MHz	--	--	--	--	--	65.0	64.0
50 MHz	--	--	--	--	--	65.0	64.0
100 MHz	--	--	--	--	--	58.0	58.0
300 MHz	--	--	--	--	--	50.0	50.0
450 MHz	--	--	--	--	--	48.0	48.0
550 MHz	--	--	--	--	--	48.0	48.0
650 MHz	--	--	--	--	--	48.0	48.0
750 MHz	--	--	--	--	--	48.0	48.0
860 MHz	--	--	--	--	--	48.0	48.0
1000 MHz	--	--	--	--	--	48.0	48.0
1220 MHz	--	--	--	--	--	48.0	48.0
Return Loss (-dB Min.)							
5-10 MHz	16.0					18.0	16.0
11-1220 MHz	16.0						
Hum Modulation (-dB Max.) @ 15 Amps							
Up	65.0						
Down	70.0						

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SPECIFICATIONS CONT'D.

Parameter	Specification						
	LHS102	LHS103	LHC108	LHC112	LHC116	LHI100	LHI116
Environmental & Physical							
RFI	-100 dB (min.)						
Housing Closure Screws	50-100 in-lb (5.6-11.3 Nm)						
Operating Temperature	-40°C to +60°C (-40°F to +140°F)						
Dimensions (H x W x D)	5.5"H x 6.2"W x 2.7"D (14.0H x 15.8W x 6.9D cm)						
Weight	1.6 lb (0.7 kg)						

NOTE:

(1) No variation greater than ± 0.2 dB over any 6 MHz bandwidth

ORDERING INFORMATION

Part #	Description
LHS102 1.22GHz	Hardline 2-way line splitter, 1.2 GHz
LHS103 1.22GHz	Hardline 3-way line splitter, 1.2 GHz
LHC108 1.22GHz	Hardline 8 dB directional coupler, 1.2 GHz
LHC112 1.22GHz	Hardline 12 dB directional coupler, 1.2 GHz
LHC116 1.22GHz	Hardline 16 dB directional coupler, 1.2 GHz
LHI100 1.22GHz	Hardline power inserter, 1.2 GHz
LHI116 1.22GHz	Hardline 16 dB power inserter/status picker, 1.2 GHz