

## LINDSAY LINE PASSIVES

### 100 Series

### 1.22 GHz Directional Coupler, Splitters, Power Inserters

#### PRODUCT OVERVIEW

Lindsay Broadband 100 Series line passives deliver reliable DOCSIS® 3.1 supported frequencies to 1.22GHz. MSO's benefit from low insertion losses and superior electrical and mechanical performances increasing network reliability and service quality to their demanding customers.

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



#### PART NUMBER DESCRIPTION

LHS102 two way splitter  
LHS103 unbalanced three way splitter  
LHC108 directional coupler 8dB  
LHC112 directional coupler 12dB  
LHC116 directional coupler 16dB  
LHI100 power inserter  
LHI116 directional coupler - 16dB + data port

#### FEATURES

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

## PASSIVE 1.22 GHz SPECIFICATIONS

Specification	Freq	LHI100	LHI116	LHS102	LHS103	LHC108	LHC112	LHC116
Tap Loss (dB Max)	5		16.4	3.8	7.2	9.3	12.4	16.4
	10		16.4	3.8	7.2	9.3	12.4	16.4
	30		16.4	3.8	7.1	9.3	12.4	16.4
	50		16.4	3.9	7.1	9.3	12.4	16.4
	100		16.4	3.9	7.1	9.3	12.4	16.4
	300		16.4	4.0	7.2	9.3	12.4	16.4
	450		16.4	4.1	7.4	9.3	12.4	16.4
	550		16.4	4.2	7.5	9.3	12.4	16.4
	650		16.4	4.2	7.6	9.3	12.6	16.4
	750		16.5	4.3	7.8	9.3	12.6	16.5
	860		16.7	4.4	8.2	9.3	12.6	16.6
	1000		16.8	4.8	8.9	9.5	12.6	16.7
1220			16.8	5.5	10.3	10.0	12.6	17.3
Insertion Loss (dB Max)	5	0.4	1.2	3.8	3.8	2.2	1.3	1.2
	10	0.4	1.2	3.8	3.8	2.2	1.3	1.2
	30	0.4	1.2	3.8	3.8	2.2	1.3	1.2
	50	0.4	1.2	3.9	3.8	2.2	1.3	1.2
	100	0.5	1.2	3.9	3.8	2.2	1.3	1.2
	300	0.6	1.3	4.0	4.2	2.3	1.4	1.3
	450	0.7	1.3	4.1	4.3	2.4	1.5	1.3
	550	0.7	1.3	4.2	4.4	2.4	1.6	1.3
	650	0.7	1.3	4.2	4.5	2.5	1.7	1.3
	750	0.8	1.4	4.3	4.6	2.5	1.7	1.4
	860	0.8	1.4	4.4	4.7	2.6	1.9	1.4
	1000	0.9	1.8	4.8	5.0	2.8	2.2	1.6
1220	1.4	2.5	5.5	6.8	3.5	3.3	2.3	
Isolation (O-T) (dB Min)	5		29	20	22	19	27	27
	10		42	28	32	25	27	40
	30		42	30	32	28	32	40
	50		42	30	32	28	30	40
	100		39	27	25	28	28	36
	300		34	23	25	25	25	28
	450		32	22	24	23	23	27
	550		31	22	24	21	22	27
	650		30	21	24	20	21	27
	750		29	20	24	18	20	26
	860		28	20	22	17	19	25
	1000		26	20	22	16	17	20
1220		23	19	20	16	17	20	

## PASSIVE 1.22 GHz SPECIFICATIONS

Specification	Freq	LHI100	LHI116	LHS102	LHS103	LHC108	LHC112	LHC116
Isolation (AC-RF) (dB Min)	5	60	60					
	10	64	64					
	30	65	64					
	50	65	64					
	100	58	58					
	300	50	50					
	450	48	48					
	550	48	48					
	650	48	48					
	750	48	48					
	860	48	48					
	1000	48	48					
	1220	48	48					
	Return Loss (dB Min)	5-10	18	16	16	16	16	16
11-1220		16	16	16	16	16	16	16
HUM Modulation (dB Max at 15 amps)	Up	65	65	65	65	65	65	65
	Down	70	70	70	70	70	70	70
RFI (dB Min)	5-1220	-100	-100	-100	-100	-100	-100	-100

## GENERAL SPECIFICATIONS

Dimensions	(H x W x D) 5.5 x 6.2 x 2.7 in; 139.7 x 165.1 x 68.6 mm
Weight	1.55 lbs. 0.70 kg
House Closure Screws	50 to 100 in lb (5.6 to 11.3 Nm)
Operating Temperature	-40 to 140 degrees F ( -40 to 60 degree C)
RFI	100 dB minimum

No variation greater than  $\pm 0.2$ dB over any 6 MHz bandwidth for Insertion Loss and Tap Loss

Note: Specifications subject to change without prior notice

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