

# 1.2 GHz Extreme Bandwidth Hardline Passives (DCs/Splitters/Power Inserters)

## LBEX SERIES



Lindsay's extreme bandwidth line 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 LBEx 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 and 15 PSI pressure tested, and are enclosed in a polyurethane coated 360 aluminum alloy housing complete with stainless steel hardware. Line passives with a swivel center conductor seizure mechanism equipped for pedestal and strand mounting allows for flexible installations. These standards compliant line passives have high current power coils and shorting bars for power grid configurations to block or pass power.



LBEx-3  
(front angled view)

### FEATURES

- Support DOCSIS 3.1 bandwidth 5-1218 MHz
- 15 A current capacity; 20 A on power inserter
- 6 kV surge protection
- Low insertion loss
- 15 PSI pressure withstand
- Polyurethane coated 380 aluminum alloy housing
- Separate gaskets for weatherproofing & RFI integrity
- Shorting bars to disable power
- Swivel center conductor seizure mechanism
- Strand & pedestal mounting
- SCTE standards compliant



LBEx-3  
(front view)



LBEx-3  
(rear view)

### SPECIFICATIONS

Parameter	Specification							
	8 dB Directional Coupler	12 dB Directional Coupler	16 dB Directional Coupler	2-Way Splitter	3-Way Splitter	3-Way Unbalanced Splitter		Power Inserter
						Low	High	
<b>Insertion Loss (-dB Max.)</b>								
5-65 MHz	2.6	1.9	1.5	4.7	7.0	8.1	4.4	1.1
65-300 MHz	2.6	2.0	1.5	4.6	6.6	7.8	4.6	1.4
300-550 MHz	2.8	2.2	1.7	4.8	6.8	7.9	4.8	1.5
550-750 MHz	3.0	2.4	1.9	4.9	7.3	8.0	4.9	1.6
750-860 MHz	3.2	2.6	2.2	5.1	7.5	8.3	5.2	1.6
860-1000 MHz	3.4	2.8	2.3	5.1	7.6	8.3	5.3	1.6
1000-1218 MHz	3.6	3.0	2.8	5.6	8.3	8.8	5.6	1.7
<b>Tap Loss (-dB typ) (± 1 dB, ± 1.5 dB for 1000-1218 MHz)</b>								
5-65 MHz	8.5	12.0	16.0	--	--	--	--	--
65-300 MHz	8.5	12.0	16.0	--	--	--	--	--
300-550 MHz	8.5	12.0	16.0	--	--	--	--	--
550-750 MHz	8.5	12.0	16.0	--	--	--	--	--
750-860 MHz	8.5	12.0	16.0	--	--	--	--	--
860-1000 MHz	8.5	12.0	16.0	--	--	--	--	--
1000-1218 MHz	8.5	12.0	16.0	--	--	--	--	--



## SPECIFICATIONS CONT'D.

Parameter	Specification						
	8 dB Directional Coupler	12 dB Directional Coupler	16 dB Directional Coupler	2-Way Splitter	3-Way Splitter	3-Way Unbalanced Splitter	Power Inserter
<b>Isolation (-dB Min.)</b>							
5-65 MHz	18.0	20.0	20.0	17.0	20.0	20.0	60.0
65-860 MHz	24.0	24.0	24.0	24.0	24.0	24.0	60.0
860-1218 MHz	20.0	20.0	20.0	20.0	20.0	20.0	52.0
<b>Return Loss (-dB Min.)</b>							
5-10 MHz	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10-50 MHz	15.0	15.0	15.0	15.0	14.0	14.0	15.0
50-950 MHz	18.0	18.0	18.0	18.0	18.0	18.0	18.0
950-1218 MHz	14.0	14.0	14.0	14.0	14.0	14.0	14.0
<b>Hum Modulation (-dBc Min.) @ 15 Amps</b>							
5-10 MHz	52	52	52	52	52	52	52
10-15 MHz	55	55	55	55	55	55	55
15-1000 MHz	60	60	60	60	60	60	60
1000-1218 MHz	55	55	55	55	55	55	55
<b>Environmental &amp; Physical</b>							
RFI	-100 dBc min.						
Operating Temperature	-40°C to +60°C (-40°F to +140°F)						
Center Conductor Seizure	15-20 in-lb (1.7-3.2 Nm)						
Housing Closure Screws	50-60 in-lb (5.6-6.8 Nm)						
Dimensions (H x W x D)	4.5"H x 5.5"W x 3.0"D (11.4H x 14.0W x 7.6D cm)						
Weight	1.4 lb (0.6 kg)						

## ORDERING INFORMATION

Part #	Description
LBEx-2	Hardline 2-way splitter, 1.2 GHz
LBEx-3	Hardline 3-way splitter, 1.2 GHz
LBEx-3B	Hardline balanced 3-way splitter, 1.2 GHz
LBEx-8	Hardline 8 dB directional coupler, 1.2 GHz
LBEx-12	Hardline 12 dB directional coupler, 1.2 GHz
LBEx-16	Hardline 16 dB directional coupler, 1.2 GHz
LBEx-PI	Hardline power inserter, 1.2 GHz