

# 55 SERIES 1.218 GHZ SPLITTERS, COUPLERS, & POWER INSERTERS [DC/DS55V-x]

## Features

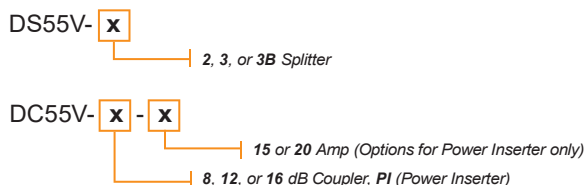
- Supports DOCSIS 3.1 Expanded Bandwidth up to 1218 MHz
- 5-1218 MHz Frequency Range
- Aluminum Alloy Housing Used for Corrosion Resistant
- Double Polyurethane Coating or Powder Coating for Greater Weather Protection
- Neoprene Weather Gasket and RFI Shielding at 120 dB
- 15 A Current Capacity / 15 A (or 20 A) Current Capacity for Power Inserter
- Rotational Seizure Mechanism for Aerial or Pedestal Installation
- Aerial or Pedestal Installation
- Compliant with SCTE Guidelines



## Application

Both a directional coupler (unequal power divider) and splitter (equal power divider) split your network's trunk and feederlines. A line power inserter enables a single cable to service the power and signal requirements of active modules in a broadband telecommunications network by passively combining radio frequency (RF) signals with up to 90 volts alternating current (VAC) from a line power supply.

## Ordering Information



Model Number	Standard Carton	Inner Box	Carton Weight	dB Values Available
DS55V-xx	30 pcs	10 pcs	20 kgs / 44 lbs	2, 3, 3B Splitter
DC55V-xx	30 pcs	10 pcs	20 kgs / 44 lbs	8, 12, 16 dB Coupler, -PI Power Inserter

*Customization available upon request*

## General Specifications

Power Passing:	15 A, 60/90 VAC for Directional Splitters & Directional Couplers 15 A, (20 A Optional) 60/90 VAC for Power Inserter
Surge Withstand:	IEEE C62.41-1991 Category B3/6kV Combination/Ring Wave
Waterproof Condition:	1.2kg/cm <sup>2</sup> 60 sec
Impedance:	75 Ohms
Connectors:	In/Out 5/8" -24 NEF female

## Mainline Splitters - 1.218 GHz

### Insertion Loss (dB)

	DS55V-2	DS55V-3B	DS55V-3		
Frequency	5-65 MHz	4.6	7.1	4.7	8.5
	65-300 MHz	4.6	7.1	4.8	8.9
	300-550 MHz	5.1	7.8	5.6	9.9
	550-750 MHz	5.5	7.8	5.5	10.4
	750-862 MHz	5.5	7.8	5.5	10.4
	862-1000 MHz	5.5	7.8	5.5	10.4
	1000-1218 MHz	6.0	8.9	6.0	11.0



### Output - Output Isolation (dB)

	DS55V-2	DS55V-3B	DS55V-3	
Frequency	5-42 MHz	24	22	22
	42-860 MHz	20	20	20
	860-1218 MHz	20	18	18

### Return Loss - Input / Output (dB)

	DS55V-2	DS55V-3B	DS55V-3	
Frequency	5-65 MHz	16	16	16
	65-950 MHz	16	16	16
	950-1218 MHz	16	16	16

## Mainline Couplers - 1.218 GHz

### Insertion Loss (dB)

	DC55V-8	DC55V-12	DC55V-16	DC55V-PI-x	
Frequency	5-65 MHz	2.9	2.1	2.0	1.0
	65-300 MHz	2.9	2.1	1.8	0.9
	300-550 MHz	3.5	2.9	2.3	0.9
	550-750 MHz	3.8	3.5	3.3	0.9
	750-862 MHz	3.8	3.5	3.3	0.9
	862-1000 MHz	3.8	3.5	3.3	0.9
	1000-1218 MHz	4.0	3.8	3.5	1.2

**Mainline Couplers - 1.218 GHz (cont.)****Tap Value (dB) Tolerance: ( $\pm 1.0$  5-1000 MHz,  $\pm 1.5$  1000-1218 MHz)**

	DC55V-8	DC55V-12	DC55V-16	DC55V-PI-x
5-65 MHz	8	12	16	
65-300 MHz	8	12	16	
300-550 MHz	8	12	16	
550-750 MHz	8	12	16	
750-862 MHz	8	12	16	
862-1000 MHz	8	12	16	
1000-1218 MHz	8	12	16	

**Output - Tap Isolation (dB)**

	DC55V-8	DC55V-12	DC55V-16	DC55V-PI-x
5-42 MHz	24	27	30	60
42-860 MHz	20	21	21	60
860-1218 MHz	19	21	21	57

**Return Loss - Input / Output / Tap (dB)**

	DC55V-8	DC55V-12	DC55V-16	DC55V-PI-x
10-47 MHz	16	16	16	16
47-950 MHz	16	16	16	16
950-1218 MHz	16	16	16	16

**Hum Modulation @ 15 A (dB)**

	DS55V-2	DS55V-3B	DS55V-3	DC55V-8	DC55V-12	DC55V-16	DC55V-PI-x
5-10 MHz	$\geq 52$	$\geq 52$	$\geq 52$	$\geq 52$	$\geq 52$	$\geq 52$	$\geq 52$
10-15 MHz	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$
15-1000 MHz	$\geq 60$	$\geq 60$	$\geq 60$	$\geq 60$	$\geq 60$	$\geq 60$	$\geq 60$
1000-1218 MHz	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$	$\geq 55$

**Screening Effectiveness (dB)**

	DS55V-2	DS55V-3B	DS55V-3B	DC55V-8	DC55V-12	DC55V-16	DC55V-PI-x
5-1000 MHz	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$
1000-1218 MHz	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$