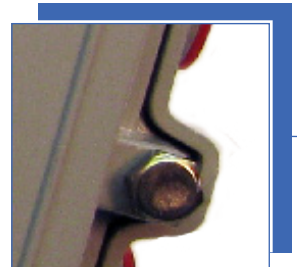


# 33 SERIES 1.218 GHz SPLITTERS & COUPLERS [DC/DS33V-x] **TaiTin**

Cable Products, Mainline Splitters & Couplers

## Features

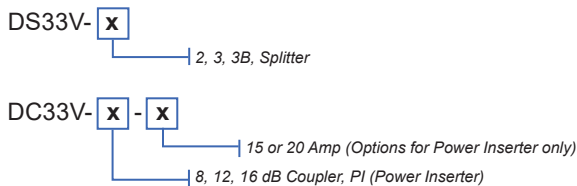
- Supports DOCSIS 3.1 Expanded Bandwidth up to 1218 MHz
- 5-1218 MHz Frequency Range
- Aluminum Alloy Housing Used for Corrosion Resistant
- Double Polyurethane Coating for Greater Weather Protection
- Neoprene Weather Gasket and RFI Shielding at 120 dB
- 15 A Current Capacity / 15 A (or 20 A) Current Capacity for Power Inserter
- Printed Circuit Board
- Aerial or Pedestal Installation
- Rotational Seizure Mechanism for 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
DS33V-xx	30 pcs	10 pcs	20 kgs / 44 lbs	2, 3, 3B Splitter
DC33V-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
Hum Modulation @ 10Amp:	≥ -70 dB
Surge Withstand:	IEEE C62.41-1991 Category B3/6kV Combination Wave, 3000 A
Waterproof Condition:	1.2kg/cm <sup>2</sup> 60 sec
Surge Protection:	1kV 1.2/50 ms
Impedance:	75 Ohms
Connectors:	In/Out 5/8" -24 NEF female

**Mainline Splitters - 1.218 GHz****Insertion Loss (dB) Tolerance: ± 0.25**

Frequency	DS33V-2	DS33V-3B	DS33V-3		dB
	5-65 MHz	4.1	6.3	4.1	
66-300 MHz	4.3	6.3	4.3	7.5	dB
301-550 MHz	4.5	6.5	4.5	7.6	dB
551-750 MHz	4.6	7.0	4.6	7.7	dB
751-862 MHz	4.8	7.2	4.9	8.0	dB
863-1000 MHz	4.8	7.3	5.0	8.0	dB
1001-1218 MHz	5.0	8.0	5.3	8.5	dB

**Output - Output Isolation (dB)**

Frequency	DS33V-2	DS33V-3B	DS33V-3	dB
	5-65 MHz	26	22	
66-860 MHz	24	24	24	dB
861-1218 MHz	22	22	22	dB

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

Frequency	DS33V-2	DS33V-3B	DS33V-3	dB
	10-47 MHz	18	18	
48-950 MHz	18	18	18	dB
951-1218 MHz	14	14	14	dB

**Mainline Couplers - 1.218 GHz****Insertion Loss (dB) Tolerance: ± 0.25**

Frequency	DC33V-8	DC33V-12	DC33V-16	DC33V-PI-x	dB
	5-65 MHz	1.8	1.3	1.0	
66-300 MHz	2.3	1.7	1.2	1.1	dB
301-550 MHz	2.5	1.9	1.4	1.2	dB
551-750 MHz	2.7	2.1	1.6	1.3	dB
751-862 MHz	2.9	2.3	1.9	1.3	dB
863-1000 MHz	3.1	2.5	2.0	1.3	dB
1001-1218 MHz	3.3	2.7	2.5	1.4	dB

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

Frequency	DC33V-8	DC33V-12	DC33V-16	DC33V-PI-x	
	5-65 MHz	8	12	16	
66-300 MHz	8	12	16		dB
301-550 MHz	8	12	16		dB
551-750 MHz	8	12	16		dB
751-862 MHz	8	12	16		dB
863-1000 MHz	8	12	16		dB
1001-1218 MHz	8	12	16		dB

**Output - Tap Isolation (dB)**

Frequency	DC33V-8	DC33V-12	DC33V-16	DC33V-PI-x	
	5-65 MHz	27.5	27.0	32.0	60.0
66-860 MHz	24.0	27.0	30.0	60.0	dB
861-1218 MHz	22.0	25.0	26.0	52.0	dB

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

Frequency	DC33V-8	DC33V-12	DC33V-16	DC33V-PI-x	
	10-47 MHz	18	18	18	18
48-950 MHz	18	18	18	18	dB
951-1218 MHz	14	14	14	14	dB

**Hum Modulation @ 10 A (dB)**

Frequency	DS33V-2	DS33V-3B	DS33V-3	DC33V-8	DC33V-12	DC33V-16	DC33V-PI-x
	5-1218 MHz	$\geq -70$	$\geq -70$	$\geq -70$	$\geq -70$	$\geq -70$	$\geq -70$

**Screening Effectiveness (dB)**

Frequency	DS33V-2	DS33V-3B	DS33V-3B	DC33V-8	DC33V-12	DC33V-16	DC33V-PI-x
	5-30 MHz	$\leq 2.5$	$\leq 2.5$	$\leq 2.5$	$\leq 2.5$	$\leq 2.5$	$\leq 2.5$
31-1000 MHz	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$	$\geq 95$
1001-1218 MHz	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$