

# 33 SERIES 1.0 GHz SPLITTERS & COUPLERS

[DC/DS33G-x] Cable Products, Mainline Splitters & Couplers

## Features

- 5-1002 MHz Bandwidth
- 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

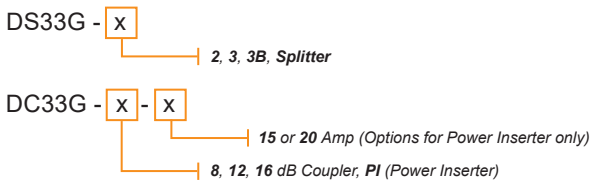


## Application

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
DS33G-xx	30 pcs	10 pcs	20 kgs / 44 lbs	2, 3, 3B Splitter
DC33G-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 Wave, 3000 A
Waterproof Condition:	1.2kg/cm <sup>2</sup> 60 sec
Impedance:	75 Ohms
Connectors:	In/Out 5/8" -24 NEF female

**Mainline Splitters - 1.0 GHz****Insertion Loss (dB) Tolerance: ± 0.25**

	DS33G-2	DS33G-3B	DS33G-3		
Frequency 5-42 MHz	3.9	6.3	4.0	7.4	dB
42-600 MHz	4.2	6.3	4.2	7.6	dB
600-800 MHz	4.5	6.7	4.6	8.1	dB
800-1002 MHz	5.1	7.7	5.2	9.3	dB

**Output - Output Isolation (dB)**

	DS33G-2	DS33G-3B	DS33G-3	
Frequency 5-15 MHz	21	22	22	dB
15-400 MHz	25	22	24	dB
400-600 MHz	21	22	22	dB
600-800 MHz	20	21	22	dB
800-1002 MHz	20	20	20	dB

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

	DS33G-2	DS33G-3B	DS33G-3	
Frequency 5-42 MHz	17	17	17	dB
42-600 MHz	18	18	18	dB
600-800 MHz	17	16	17	dB
800-1002 MHz	17	17	17	dB

**Mainline Couplers - 1.0 GHz****Insertion Loss (dB) Tolerance: ± 0.25**

	DC33G-8	DC33G-12	DC33G-16	DC33G-PI-x	
Frequency 5-42 MHz	1.6	1.2	1.0	0.7	dB
42-600 MHz	1.9	1.3	1.2	0.7	dB
600-800 MHz	2.5	1.7	1.4	0.9	dB
800-1002 MHz	3.1	2.2	2.0	1.0	dB

**Tap Value (dB) Tolerance: ± 1.5**

	DC33G-8	DC33G-12	DC33G-16	DC33G-PI-x	
Frequency 5-600 MHz	8	12	16	-	dB
600-800 MHz	8	12	16	-	dB
800-1002 MHz	8	12	16	-	dB

**Mainline Couplers - 1.0 GHz (cont.)****Output - Tap Isolation (dB)**

	<b>DC33G-8</b>	<b>DC33G-12</b>	<b>DC33G-16</b>	<b>DC33G-PI-x</b>		
Frequency	5-15 MHz	21	23	24	63	dB
	15-400 MHz	28	27	30	60	dB
	400-600 MHz	25	25	27	60	dB
	600-800 MHz	21	21	20	60	dB
	800-1002 MHz	20	20	20	52	dB

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

	<b>DC33G-8</b>	<b>DC33G-12</b>	<b>DC33G-16</b>	<b>DC33G-PI-x</b>		
Frequency	5-42 MHz	17	17	17	18	dB
	42-600 MHz	18	18	18	18	dB
	600-800 MHz	17	17	17	17	dB
	800-1002 MHz	17	17	17	17	dB

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

	<b>DS33G-2</b>	<b>DS33G-3B</b>	<b>DS33G-3</b>	<b>DC33G-8</b>	<b>DC33G-12</b>	<b>DC33G-16</b>	<b>DC33G-PI-x</b>
Frequency	5-10 MHz	≥ -52	≥ -52	≥ -52	≥ -52	≥ -52	≥ -52
	10-15 MHz	≥ -55	≥ -55	≥ -55	≥ -55	≥ -55	≥ -55
	15-1002 MHz	≥ -60	≥ -60	≥ -60	≥ -60	≥ -60	≥ -60

**Screening Effectiveness (dB)**

	<b>DS33G-2</b>	<b>DS33G-3B</b>	<b>DS33G-3</b>	<b>DS33G-8</b>	<b>DS33G-12</b>	<b>DS33G-16</b>	<b>DS33G-PI-x</b>
Frequency	5-1002 MHz	≥ 95	≥ 95	≥ 95	≥ 95	≥ 95	≥ 95