

55 SERIES 1.218 GHz SPLITTERS & COUPLERS [DC/DS55V-x]

Cable Products, Mainline Splitters & Couplers



Features

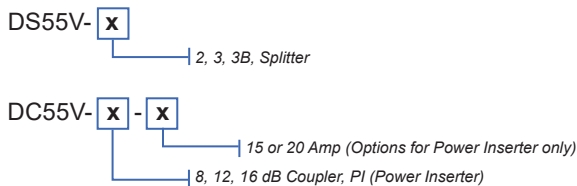
- Supports DOCSIS 3.1 Expanded Bandwidth up to 1218 MHz
- 5-1218 MHz Frequency Range
- Aluminum Alloy Housing Used for Corrosion Resistant
- Double Polyurethane Coating for Greater Weather Protection
- Neoprene Weather Gasket and RFI Shielding at 120 dB
- 15 A Current Capacity / 15 A (or 20 A) Current 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 |
|--------------|-----------------|-----------|-----------------|--|
| 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 |
| Hum Modulation @ 10Amp: | ≥ -70 dB |
| Surge Withstand: | IEEE C62.41-1991 Category B3/6kV Combination Wave, 3000 A |
| Waterproof Condition: | 1.2kg/cm ² 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 | DS55V-2 | DS55V-3B | DS55V-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 | DS55V-2 | DS55V-3B | DS55V-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 | DS55V-2 | DS55V-3B | DS55V-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 | DC55V-8 | DC55V-12 | DC55V-16 | DC55V-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: ± 1.0 (± 1.5 for 1000-1218MHz)**

| Frequency | DC55V-8 | DC55V-12 | DC55V-16 | DC55V-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 | DC55V-8 | DC55V-12 | DC55V-16 | DC55V-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 | DC55V-8 | DC55V-12 | DC55V-16 | DC55V-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 | DS55V-2 | DS55V-3B | DS55V-3 | DC55V-8 | DC55V-12 | DC55V-16 | DC55V-PI-x |
|-----------|------------|------------|------------|------------|------------|------------|------------|
| | 5-1218 MHz | ≥ -70 | ≥ -70 | ≥ -70 | ≥ -70 | ≥ -70 | ≥ -70 |

Screening Effectiveness (dB)

| Frequency | DS55V-2 | DS55V-3B | DS55V-3B | DC55V-8 | DC55V-12 | DC55V-16 | DC55V-PI-x |
|---------------|------------|-----------|-----------|-----------|-----------|-----------|------------|
| | 5-1000 MHz | ≥ 95 | ≥ 95 | ≥ 95 | ≥ 95 | ≥ 95 | ≥ 95 |
| 1001-1218 MHz | ≥ 85 | ≥ 85 | ≥ 85 | ≥ 85 | ≥ 85 | ≥ 85 | ≥ 85 |