Features and Benefits

1.8 GHz Horizontal Splitters
CMC5000H-A Series

Reliability, quality and performance define the Antronix extended bandwidth 1.8 GHz digital horizontal splitters. The CMC5000 series digital splitters provide the data capacity of Extended Spectrum DOCSIS (ESD) performance. Every port on the splitter is 6 kV ring wave surge protected while our proprietary ferrites remain ultra linear following several surges. The splitter ports are SCTE compliant with 1 inch spacing. Capacitively coupled F-ports block AC surges and prevent hum modulation. The CMC5000 series digital splitters employ high Q surface mount technology (SMT) components, guaranteeing consistent performance over time and temperature.

- **6 kV Ring Wave Surge Withstand**
  All ports withstand multiple 6 kV ring wave surges per IEEE specification C62.41 Category A3.
- **DOCSIS 4.0 Ready**
  Compatible with existing and future networks.
- **1.8 GHz Bandwidth with Minimum Insertion Loss**
  Supports present and future multimedia applications including video, data and telephony.
- **-45 dBmV Spurious and Harmonics after 6 kV Ring Wave Surges with +55 dBmV Return Signal**
  Proprietary ferrite blend inhibits re-magnetization of the core du to voltage spikes from impulse noise or lightning. The ferrite remains ultra linear to prevent intermodulation where high level return carriers can affect forward path video signals.
- **Eclipse Contact Technology (ECT) F-port**
  Provides 400% more contact surface area for lower contact resistance and higher reliability.
- **Capacitively Coupled F-ports**
  Protects against core re-magnetization and saturation while blocking AC surges.
- **Zinc Allow Diecast Housing w/ 100% Soldered Backplate**
  Superior corrosion resistant tin plating with repeatable RFI shielding.
- **1 inch Port-to-Port Spacing 15 psi Sealed, SCTE Compliant F-port**
  Prevents water migration and flat F-port interface ensures an excellent ground connection to F-connector.

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ANTRONIX®

Specifications
CMC5000H-A Series

Model		CMC5002H-A		CMC5003H-A		CMC5004H-A	
Specification	**Frequency** (MHz)	**Max/Min**	**Typ**	**Max/Min**	**Typ**	**Max/Min**	**Typ**
Insertion Loss dB (max)	5-400	4.2	4.0	4.3/7.8	4.0/7.5	7.8	7.5
	400-600	4.3	4.2	4.5/7.9	4.2/7.6	7.8	7.5
	600-870	4.4	4.3	4.6/8.8	4.3/8.5	8.2	8.0
	870-1002	4.4	4.3	4.6/8.8	4.3/8.5	8.3	8.0
	1002-1218	4.6	4.5	4.8/8.9	4.5/8.6	8.6	8.4
	1218-1800	5.4	5.2	5.8/10.0	5.6/9.8	10.0	9.8
Isolation dB (min)	5-12	20	22	20	22	20	22
	12-65	26	28	28	30	28	30
	65-204	26	28	25	28	25	28
	204-870	26	28	25	28	25	28
	870-1002	26	27	22	25	22	25
	1002-1218	22	24	20	22	20	22
	1218-1800	22	23	20	22	20	22
Input Return Loss dB (min)	5-12	20	22	18	20	16	18
	12-204	20	22	18	20	18	20
	204-870	20	22	18	20	18	20
	870-1002	20	22	18	20	18	20
	1002-1218	18	20	18	20	18	20
	1218-1800	16	18	16	18	16	18
Output Return Loss dB (min)	5-12	20	22	18	20	18	20
	12-204	20	22	18	20	18	20
	204-870	20	22	18	20	18	20
	870-1002	20	22	18	20	18	20
	1002-1218	18	20	18	20	18	20
	1218-1800	16	18	16	18	16	18
RFI Isolation dB(min)	5-1218	120					
	1218-1675	110					
	1675-1800	100					

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Specifications
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General	
Nominal Impedance	75Ω
Surge Withstand	6 kV Ring Wave Surge, IEEE C62.41 Cat. A3
Second Harmonic	-45 dBmV after 6 kV Ring Wave Surge with a +55 dBmV Return Input Carrier
F-connector Type	SCTE Compliant ECT F-port

Environmental	
Operating Temperature	-40°C to +60°C
Pressure Seal	15 psi
Corrosion Resistance	ANSI/SCTE-143 salt spray for 1000 hours

Physical			
Model	**Length**	**Width**	**Depth**
CMC5002H-A	1.9" (48.0 mm)	2.4" (61.0 mm)	0.6" (16.2 mm)
CMC5003H-A	1.9" (48.0 mm)	3.4" (86.0 mm)	0.6" (16.2 mm)
CMC5004H-A	2.1" (52.3 mm)	4.0" (101.4 mm)	1.2" (31.0 mm)

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