

Features and Benefits

ANTRONIX®

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 speed and data capacity of Extended Spectrum (ESD) DOCSIS performance. Every port on the splitters is 6 kV ring wave 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 Protected**
All ports are protected against 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 Surge with a +55 dBmV Return Signal**
Proprietary ferrite blend inhibits re-magnetization of the core due 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 Alloy Diecast Housing and Backplate w/Nickel Tin Plating**
Superior corrosion resistant plating with a diecast backplate protects the back of the housing where corrosion is more prominent.
- **100% Soldered Back**
Ensures repeatable RFI shielding.
- **1 inch Port-to-Port Spacing Flat 15 psi Sealed, SCTE Compliant F-port**
Prevents water migration in to the splitter and ensures an excellent ground connection.
- **UV Resistant Label**
- **SCTE Compliant F-ports with 1 inch Port Spacing**
Prevents water migration into the splitter and ensures an excellent ground connection.



Specifications CMC5000H-A Series

Model#		CMC5002H-A		CMC5003H-A		CMC5004H-A	
Specification	Frequency (MHz)	Max/Min	Avg	Max/Min	Avg	Max/Min	Avg
Insertion Loss dB(max)	5-40	4.4	3.7	4.4/7.9	3.9/7.4	7.7	7.2
	40-200	4.3	3.5	4.3/7.7	3.8/7.2	7.7	6.9
	200-550	4.3	3.7	4.5/8.0	4.0/7.5	7.7	7.2
	550-750	4.4	3.8	4.7/8.3	4.2/7.8	8.0	7.5
	750-1002	4.6	4.0	4.8/8.3	4.3/8.0	8.3	7.8
	1002-1218	4.8	4.2	4.9/8.9	4.4/8.4	8.6	8.1
	1218-1675	5.4	4.8	5.2/9.4	4.6/8.8	9.5	8.8
	1675-1800	5.8	5.1	5.8/10.0	4.8/9.2	10.0	9.0
Isolation dB(min)	5-10	20	22	20	22	20	22
	10-40	26	28	26	28	26	28
	40-200	25	30	24	29	25	29
	200-550	26	35	24	27	26	28
	550-750	26	30	24	28	26	28
	750-1002	26	28	22	28	22	28
	1002-1218	22	28	20	25	20	25
	1218-1675	22	26	20	24	20	24
1675-1800	22	26	20	24	20	24	
Input Return Loss dB(min)	5-10	16	17	16	17	16	18
	10-200	18	25	18	32	18	27
	200-550	20	25	20	27	18	27
	550-750	18	28	18	23	18	22
	750-1002	18	22	18	20	18	20
	1002-1218	18	20	16	18	16	20
	1218-1675	16	19	16	17	16	17
	1675-1800	16	17	16	17	16	17
Output Return Loss dB(min)	5-10	18	19	18	19	18	20
	10-200	20	30	18	22	18	22
	200-550	20	32	18	22	20	22
	550-750	20	25	18	21	20	20
	750-1002	18	20	18	20	18	18
	1002-1218	16	18	16	18	16	18
	1218-1675	16	18	16	17	16	17
	1675-1800	16	18	16	17	16	17
RFI Isolation dB(min)	5-1218	120					
	1218-1675	110					
	1675-1800	100					

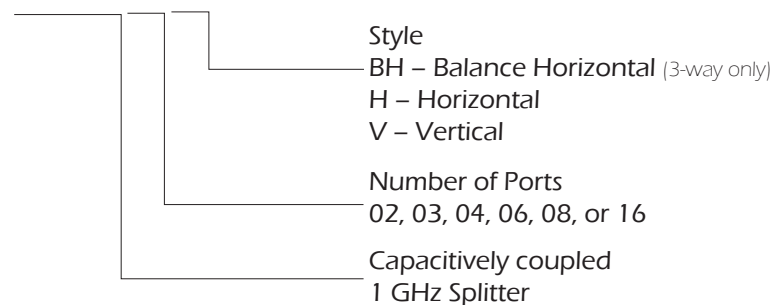
Specifications CMC5000H-A Series

General	
Nominal Impedance	75 Ω
RFI Minimum	120 dB
Surge Protection	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	
Pressure Seal	15 psi
Operating Temperature	-40 °C to 60 °C
Corrosion Resistance	Meets SCTE/ANSI Specification

Physical			
Dimensions (Tol. ±0.5 mm)	Length (mm)	Width (mm)	Depth (mm)
Model			
CMC5002H-A	1.9 (48.0)	2.4 (61.0)	0.6 (16.2)
CMC5003H-A	1.9 (48.0)	3.4 (86.0)	0.6 (16.5)
CMC5004H-A	2.1 (52.3)	4.0 (101.4)	1.2 (31.0)

Ordering Information

CMC50XXXXH-A



(Ex.) CMC5000BH-A: 3-way horizontal splitter with balanced outputs