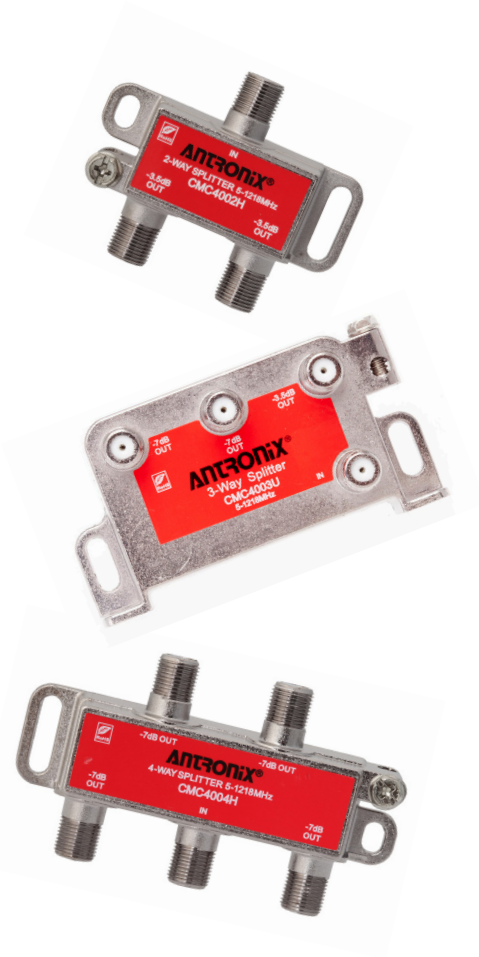
Features and Benefits

ANTRONIX®

1.218 GHz Digital Splitters
CMC4000 Series

Reliability, quality and performance define the Antronix CMC4000 series digital splitter. Our digital splitters have been designed specifically for today's two-way broadband networks. Low intermodulation distortion and high port-to-port return band isolation prevent high power cable modem signals from distorting neighboring port signals. Capacitively coupled F-ports block AC surges and prevent hum modulation. Additionally, our splitters are among the most robust in the industry. Every port on each CMC4000 series splitter can withstand 6 kV ring wave surges, while our proprietary ferrites remain ultralinear following several surges. To ensure years of reliable performance, Antronix's splitters are encased in a zinc alloy diecast housing with nickel tin plating. The splitter ports are sealed to 15 psi and are SCTE compliant. The CMC4000 series splitters guarantee consistent performance over time and temperature.



- **6 kV Ring Wave Surge Withstand**
  All ports can withstand multiple 6 kV ring wave surges per IEEE specification C62.41 Category A3.
- **-45 dBmV Spurious and Harmonics after 6 kV Ring Wave with a +55 dBmV Return Signal**
  Proprietary ferrite bead 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.
- **Digital Broadcast and HDTV Ready**
  Compatible with existing and future networks such as VoIP and DOCSIS 3.0.
- **Flat 1.218 GHz Bandwidth with Minimal Insertion Loss**
  Supports present and future multimedia applications including video, data and telephony.
- **High Return Path Output Return Loss and Port-to-Port Return Band Isolation**
  Excellent return path performance compatible with two-way digitally modulated networks.
- **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 combined with a diecast backplate protects the back of the housing where corrosion is more prominent.
- **100% Soldered Back**
  Ensures repeatable 120 dB RFI shielding.
- **Flat 15 psi Sealed, SCTE Compliant F-ports**
  Prevents water migration in to the splitter and ensures an excellent ground connection.
- **UV Resistant Label**
- **Integrated Mounting Tabs and Heavy Duty Ground Block for Years of Reliable Service**

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Electrical Specifications
CMC4000H Series Horizontal Splitter

Model #		CMC4002H		CMC4003H		CMC4003BH		CMC4004H		CMC4008H	
Specification	**Freq** (MHz)	**Max/Min**	**Typ**	**Max/Min**	**Typ**	**Max/Min**	**Typ**	**Max/Min**	**Typ**	**Max/Min**	**Typ**
Insertion Loss											
Maximum (dB)	5-15	3.5	3.3	3.5 / 7.0	3.4 / 6.8	5.8	5.5	7.0	6.8	11.2	11.0
	15-85	3.5	3.3	3.6 / 7.0	3.4 / 6.8	5.8	5.5	7.2	6.8	11.0	10.8
	85-200	3.6	3.3	3.6 / 7.2	3.6 / 7.1	5.8	5.5	7.2	6.8	11.2	11.0
	200-550	3.7	3.5	3.8 / 7.5	3.8 / 7.4	6.0	5.8	7.4	7.0	11.5	11.2
	550-750	3.8	3.7	4.0 / 7.7	4.0 / 7.8	6.2	6.0	7.6	7.2	12.0	11.8
	750-1002	4.2	3.8	4.2 / 8.5	4.0 / 8.0	6.8	6.3	8.5	7.6	12.5	12.3
	1002-1218	4.6	4.5	4.6 / 8.9	4.5 / 8.5	7.5	7.3	8.9	8.5	12.9	12.5
Isolation											
Minimum (dB)	5-15	24	30	24	30	24	30	24	30	22	24
	15-85	35	40	34	40	30	36	35	40	30	34
	85-200	30	38	30	35	28	30	28	35	25	28
	200-550	25	35	25	35	22	25	25	30	25	26
	550-750	25	30	25	30	22	25	25	30	22	24
	750-1002	22	28	22	28	22	25	22	28	22	24
	1002-1218	22	23	22	23	22	24	22	24	22	24
Input Return Loss											
Minimum (dB)	5-15	22	25	22	25	22	28	20	22	20	22
	15-85	25	30	22	28	22	30	20	22	25	26
	85-200	23	30	23	26	22	30	20	25	20	22
	200-550	20	28	20	25	20	25	20	25	20	22
	550-750	20	25	20	25	20	25	20	24	20	22
	750-1002	20	25	20	25	20	25	20	24	20	22
	1002-1218	18	21	18	21	18	20	18	20	18	20
Output Return Loss											
Minimum (dB)	5-15	22	28	20	25	20	25	20	25	20	22
	15-85	35	40	30	38	25	35	30	38	28	30
	85-200	25	38	24	30	22	33	24	30	20	22
	200-550	22	28	20	28	20	25	20	25	20	22
	550-750	20	25	20	25	20	25	20	24	20	22
	750-1002	20	25	20	25	20	25	20	24	20	22
	1002-1218	18	21	18	21	18	20	18	20	18	20
RFI Isolation											
Minimum (dB)	5-1218	120									

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Electrical Specifications
CMC4000U Series Universal Splitter

Model #		CMC4002U		CMC4003U		CMC4003BU		CMC4004U		CMC4006U		CMC4008U	
Specification	**Freq** (MHz)	**Max/ Min**	**Typ**	**Max/ Min**	**Typ**	**Max/ Min**	**Typ**	**Max/ Min**	**Typ**	**Max/ Min**	**Typ**	**Max/ Min**	**Typ**
Insertion Loss													
Maximum (dB)	5-15	3.5	3.3	3.5 / 7.0	3.3 / 6.8	6.0	5.5	7.0	6.8	9.2	9.0	11.2	11.0
	15-85	3.5	3.3	3.5 / 7.0	3.4 / 6.8	5.8	5.5	7.2	6.8	9.4	9.2	11.0	10.8
	85-200	3.6	3.5	3.6 / 7.2	3.4 / 7.0	6.0	5.5	7.4	7.0	9.6	9.4	11.2	11.0
	200-550	3.8	3.5	3.8 / 7.4	3.6 / 7.2	6.0	5.8	7.6	7.2	10.1	9.6	11.5	11.2
	550-750	3.9	3.6	4.0 / 7.8	3.8 / 7.4	6.4	6.0	7.8	7.4	10.5	9.8	12.2	11.8
	750-1002	4.3	3.8	4.4 / 8.3	4.0 / 8.0	6.9	6.5	8.2	7.8	10.9	10.5	12.5	12.3
	1002-1218	4.6	4.4	4.8 / 8.9	4.7 / 8.5	7.5	7.2	8.6	8.4	11.4	11.2	13.0	12.7
Isolation													
Minimum (dB)	5-15	22	25	22	25	22	25	22	25	22	24	22	24
	15-85	32	40	32	40	30	38	32	34	28	35	30	35
	85-200	25	35	25	30	25	28	28	32	24	28	25	28
	200-550	25	28	25	28	25	28	25	28	24	26	25	26
	550-750	25	28	25	28	25	26	25	26	24	26	25	26
	750-1002	22	24	22	24	22	24	22	24	22	24	22	24
	1002-1218	22	24	22	24	22	24	22	24	21	23	22	24
Input Return Loss													
Minimum (dB)	5-15	20	22	20	22	20	22	20	22	20	22	20	22
	15-85	22	25	22	25	22	28	20	22	20	25	25	25
	85-200	20	22	20	22	20	22	20	22	18	22	20	22
	200-550	20	22	20	22	20	22	20	22	18	20	20	22
	550-750	20	22	20	22	20	22	20	22	18	20	20	22
	750-1002	20	22	20	22	20	22	20	22	18	20	20	22
	1002-1218	18	20	18	22	18	20	18	22	18	20	18	20
Output Return Loss													
Minimum (dB)	5-15	20	22	20	22	20	22	20	22	20	22	20	22
	15-85	30	38	30	38	25	35	28	38	24	30	26	30
	85-200	22	28	22	28	20	22	22	28	18	22	20	22
	200-550	20	25	20	25	20	22	20	25	18	20	20	22
	550-750	20	22	20	22	20	22	20	22	18	20	20	22
	750-1002	20	22	20	22	20	22	20	22	18	20	20	22
	1002-1218	18	22	18	22	18	20	18	22	18	20	18	20
RFI Isolation													
Minimum (dB)	5-1218	120											

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Specifications
CMC4000 Series

General	
Nominal Impedance	75 Ω
F-connector Type	ANSI/SCTE-01 Compliant ECT F-port
Recommended Torque	30 in-lbs
Surge Withstand	6 kV Ring Wave Surge per IEEE C62.41 Category A3
Second Harmonic	-45 dBmV after 6 kV ring wave surge with a +55 dBmV return input carrier
Environmental	
Pressure Seal	15 psi
Operating Temperature	-40 °C to 60 °C
Corrosion Resistance	Exceeds ANSI/SCTE 143 specifications for 1000 hour

Ordering Information

CMC40XXXX

Style
BH – Balance Horizontal (3-way only)
H – Horizontal
U – Universal

Number of Ports
02, 03, 04, 06 or 08

Capacitively coupled
1.218 GHz Splitter

(Ex.) CMC4003BH: 3-way horizontal splitter with balanced outputs



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