Features and Benefits

ANTRONIX®

1 GHz Digital Splitters
CMC2000 Series

Reliability, quality and performance define the Antronix CMC2000 series digital splitter. Our horizontal, vertical and universal digital splitters have been designed specifically for today's two-way broadband networks and the CMC2000Us are ideal for Network Interface Device (NID) box installations. Our digital splitters are among the most robust in the industry. Every port on each CMC2000 series splitter withstands multiple 6 kV ring wave surges, while our proprietary ferrites remain ultra-linear following several surges. The CMC2000 series digital splitters are encased in a zinc alloy diecast housing with nickel alloy plating and employ high "Q" surface mount technology (SMT) components - guaranteeing consistent performance over time and temperature. With more than 90 versions available, there is a CMC2000 digital splitter for every network need.

- **6 kV Ring Wave Surge Withstand**
  All ports withstand multiple 6 kV ring wave surges per IEEE specification C62.41 Category A3.
- **-45 dBmV Spurious and Harmonics after 5 Surges of 6 kV Ring Wave 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.
- **Digital Broadcast and HDTV Ready**
  Compatible with existing and future networks.
- **Flat 1 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/Proprietary Nickel Alloy 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.
- **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**
- **Integrated Mounting Tabs and Heavy Duty Ground Block for Years of Reliable Service**
- **Available in Universal Mount Design Ideal for NID Enclosures**
  For either vertical or all ports facing down installation.

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Electrical Specifications

CMC2000 Series 1 GHz Horizontal Digital Splitters

Model #		CMC2002H		CMC2003H		CMC2003BH		CMC2004H		CMC2008H	
Specification	**Freq** (MHz)	**Max/Min**	**Typ**	**Max/Min**	**Typ**	**Max/Min**	**Typ**	**Max/Min**	**Typ**	**Max/Min**	**Typ**
Insertion Loss											
Maximum (dB)	5-14	3.5	3.3	3.5 / 7.0	3.3 / 6.5	5.8	5.5	7.0	6.8	11.2	10.8
	14-40	3.5	3.3	3.5 / 7.0	3.3 / 6.5	5.8	5.5	7.2	6.8	11.0	10.8
	40-200	3.6	3.3	3.5 / 7.1	3.3 / 6.5	5.8	5.5	7.2	6.8	11.2	10.8
	200-550	3.7	3.5	3.7 / 7.4	3.5 / 6.8	6.0	5.8	7.4	7.0	11.5	11.0
	550-750	3.8	3.7	3.9 / 7.6	3.6 / 7.2	6.2	6.0	7.6	7.2	12.0	11.5
	750-1002	4.2	3.8	4.2/ 8.3	3.8 / 7.8	6.8	6.3	8.2	7.6	12.5	12.0
Isolation											
Minimum (dB)	5-14	24	30	24	30	24	30	24	30	23	28
	14-40	35	40	35	40	30	36	35	40	30	40
	40-200	30	38	30	35	28	33	28	35	25	35
	200-550	25	35	25	35	23	25	25	30	25	28
	550-750	25	30	25	30	23	25	25	30	23	28
	750-1002	23	28	23	28	23	25	23	28	23	26
Input Return Loss											
Minimum (dB)	5-14	22	25	22	25	22	28	20	22	22	25
	14-40	25	30	22	28	22	30	20	22	25	30
	40-200	23	30	23	26	22	30	20	25	20	28
	200-550	20	28	20	25	20	25	20	25	20	25
	550-750	20	25	20	25	20	25	20	24	20	25
	750-1002	20	25	20	25	20	25	20	24	20	24
Output Return Loss											
Minimum (dB)	5-14	22	28	20	25	20	25	20	25	20	23
	14-40	35	40	30	40	25	35	30	38	28	35
	40-200	25	38	24	30	22	33	24	30	20	28
	200-550	22	28	20	28	20	25	20	25	20	28
	550-750	20	25	20	25	20	25	20	24	20	24
	750-1002	20	25	20	25	20	25	20	24	20	24
RFI Isolation											
dB(min)	5-1002	120									

Specifications subject to change without notice

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Electrical Specifications

CMC2000 Series 1 GHz Vertical/Universal Digital Splitters

Model #		CMC2002V/U		CMC2003V/U		CMC2003BV/U		CMC2004V/U		CMC2006V/U		CMC2008V/U	
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)	5-14	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	10.8
	14-40	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
	40-200	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	9.8	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	10.2	10.0	12.2	11.8
	750-1002	4.3	3.8	4.3 / 8.3	4.0 / 8.0	6.9	6.5	8.2	7.8	10.5	10.2	12.5	12.3
Isolation													
Minimum (dB)	5-14	23	25	23	25	23	25	23	25	23	25	23	25
	14-40	32	40	32	40	30	38	32	40	28	35	28	35
	40-200	25	35	25	30	25	35	28	35	24	28	25	28
	200-550	25	28	25	28	23	28	25	28	23	28	25	28
	550-750	25	28	25	28	23	28	25	28	23	26	23	26
	750-1002	23	25	23	25	23	25	23	25	23	25	23	25
Input Return Loss													
Minimum (dB)	5-14	20	22	20	22	20	22	20	22	20	22	20	22
	14-40	22	25	22	25	22	25	22	25	20	25	25	25
	40-200	20	22	20	22	20	22	20	22	18	22	18	22
	200-550	20	22	20	22	20	22	20	22	18	20	18	22
	550-750	20	22	20	22	20	22	20	22	18	20	18	20
	750-1002	20	22	20	22	18	22	20	22	18	20	18	20
Output Return Loss													
Minimum (dB)	5-14	20	22	20	22	20	22	20	22	20	22	20	22
	14-40	30	38	30	38	25	35	30	38	25	30	26	30
	40-200	22	28	22	28	22	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	18	22	20	22	18	20	20	22
RFI Isolation													
dB(min)	5-1002	120											

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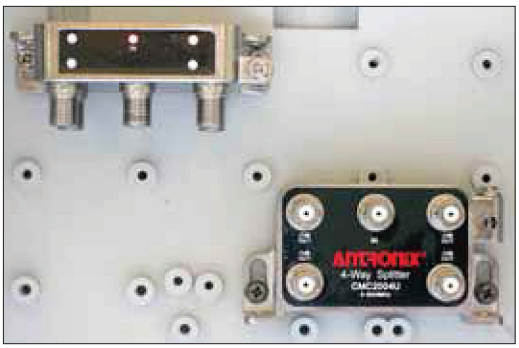
Specifications
CMC2000 Series 1 GHz Digital Splitters

General	
Nominal Impedance	75 Ω
F-connector Type	ANSI/SCTE-01 (formerly SCTE IPS-SP-400) Compliant ECT F-port
F-connector Torque Specs	30 in-lbs
Surge Withstand	6 kV Ring Wave Surge per IEEE C62.41 Category A3
Second Harmonic	-45 dBmV after Five 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	Meets SCTE/ANSI Specification

Physical			
Dimensions (Tol. ±0.5mm)	**Length** (mm)	**Width** (mm)	**Depth** (mm)
Model			
CMC2002H	1.9 (48.0)	2.4 (61.0)	0.6 (16.2)
CMC2003H, CMC2003BH, CMC2004H	1.9 (48.0)	3.4 (86.0)	0.6(16.5)
CMC2008H	2.1 (52.3)	4.0 (101.4)	1.2 (31.0)
CMC2002V/U	1.4 (36.5)	2.3 (57.5)	1.1 (30.0)
CMC2003V/U, CMC2003BV/U, CMC2004V/U	1.6 (41.0)	3.3 (85.0)	1.2 (31.0)
CMC2006V/U, CMC2008V/U	2.8 (70.0)	3.5 (89.0)	1.2 (31.0)

CMC2000U Series Installation

All ports facing down



Traditional mount

Ordering Information

CMC20XXXX

Style
BH – Balanced Horizontal (3-way only)
BV – Balanced Vertical (3-way only)
BU – Balanced Universal (3-way only)
H – Horizontal
V – Vertical
U – Universal

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

Capacitively coupled
1 GHz Splitter

(Ex.) CMC2003BU: 3-way universal splitter with balanced outputs

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