

CMC2000U Series 1 GHz Universal Mount Digital Splitters



Overview

The Antronix CMC2000U Series Universal Mount Splitters are ideal for Network Interface Device (NID) box installations. Our universal mount digital splitters have been designed specifically for today's two-way broadband networks. Capacitively coupled F-ports block AC surges and prevent hum modulation. Low intermodulation distortion and excellent return band isolation prevent high power cable modem signals from distorting neighboring port signals.

Reliability, quality and performance define the Antronix CMC2000U series universal mount digital splitter. Every port on each CMC2000U series splitter is built to survive 6 kV ring wave surges, while our proprietary ferrites remain ultra-linear even after several surges. The universal mount design reduces cable bends inside NID enclosures; making installation easier and more reliable.

To ensure years of reliable performance, Antronix's digital splitters are encased in a Zinc Alloy diecast housing with Nickel Alloy plating. The splitter ports are sealed to 15 psi and SCTE compliant with 1 inch spacing. The CMC2000U series digital splitters employ high "Q" surface mount technology (SMT) components, guaranteeing consistent performance over time and temperature.

Features/Benefits:

- Universal Mount design – Ideal for NID enclosures**
 Universal mounting design allows for easy NID box installation in either the traditional vertical splitter method or new all ports facing down configuration
- Increases reliability**
 Reduction in cable bends reduces stress on cables and connectors to increase reliability
- 6 kV ring wave surge protected**
 All ports are protected against 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
- 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-ports
 Prevents water migration into the splitter and ensures an excellent ground connection
- UV resistant label**

Electrical Specifications

Model Number		CMC2002U	CMC2003U	CMC2003BU	CMC2004U	CMC2008U	
Specification	Freq (MHz)	Typ	Typ	Typ	Typ	Typ	
Insertion Loss							
Maximum (dB)	5 - 14	3.2	3.2	6.5	4.9	6.5	10.3
	14 - 40	3.3	3.3	6.5	5.0	6.5	10.2
	40 - 200	3.3	3.3	6.5	5.0	6.5	10.1
	200 - 550	3.3	3.3	6.6	5.2	6.6	10.3
	550 - 750	3.5	3.5	7.0	5.5	7.0	10.7
	750 - 1000	3.7	3.7	7.6	5.9	7.2	11.0

Isolation						
Minimum (dB)	5 - 14	32	35	31	38	38
	14 - 40	46	39	42	44	42
	40 - 200	44	30	40	43	41
	200 - 550	34	28	33	37	38
	550 - 750	32	28	33	32	30
	750 - 1000	32	27	31	30	27

Input Return Loss						
Minimum (dB)	5 - 14	42	34	36	27	30
	14 - 40	30	25	38	22	31
	40 - 200	32	26	31	23	31
	200 - 550	35	29	24	28	24
	550 - 750	31	28	27	28	23
	750 - 1000	22	25	24	28	28

Output Return Loss						
Minimum (dB)	5 - 14	30	27	28	27	26
	14 - 40	38	34	35	36	31
	40 - 200	41	32	31	34	30
	200 - 550	39	29	28	34	30
	550 - 750	32	29	31	29	28
	750 - 1000	26	25	26	27	28

RFI Isolation						
dB (min)	5 - 1000	120				

General Specifications

Nominal Impedance	75Ω
F-Connector Type	ANSI/SCTE-01 (formerly SCTE IPS-SP-400) Compliant ECT F-port
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 Specifications

Pressure Seal	15 psi
Operating Temperature	-40 °C to 60 °C (-40 °F to 140 °F)
Corrosion Resistance	Meets SCTE/ANSI Specification

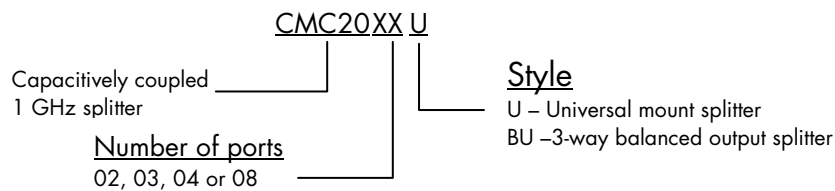
Specifications Subject to change without notice

Physical Specifications

Dimensions (Tol. ±0.5mm)	Height Inches (mm)	Width Inches (mm)	Depth Inches (mm)
Model			
CMC2002U	1.6 (40.6)	2.4 (61.0)	1.2 (30.5)
CMC2003U, CMC2003BU, CMC2004U	1.8 (45.7)	2.3 (58.4)	1.2 (30.5)
CMC2008U	2.9 (73.7)	3.5 (88.9)	1.1 (27.9)

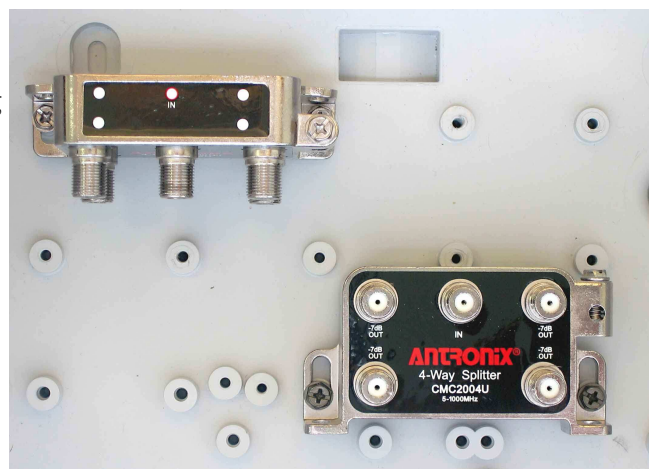
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Ordering Information



Application - NID Boxes

All ports facing
down



Traditional
mount

CMC2000U-Series Universal Mount Splitters

Contact Information

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