

Features and Benefits

ANTRONIX®

1 GHz Universal Mount Digital Splitters CMC2000U Series

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.



- **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

CMC2000U Series 1 GHz Universal Mount Digital Splitters

Model #		CMC2002U	CMC2003U		CMC2003BU	CMC2004U	CMC2008U
Specification	Freq (MHz)	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
	750-1002	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
	750-1002	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
	750-1002	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
	750-1002	26	25		26	27	28
RFI Isolation							
dB (min)	5-1002	120					



Specifications

CMC2000U Series 1 GHz Universal Mount Digital Splitters

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

Physical			
Dimensions (Tol. \pm 0.5mm)	Height (mm)	Width (mm)	Depth (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)

Ordering Information

CMC20XXU

Style
 U - Universal Mount Splitter
 BU - 3-Way Balanced Output Splitter

Number of Ports
 02, 03, 04 or 08

Capacitively Coupled
 1 GHz Splitter

Application - NID Boxes

All ports facing down



CMC2000U-Series Universal Mount Splitters

Traditional mount