Features and Benefits

ANTRONIX®

CMCDT2000H/V
Drop Directional Taps, 1 GHz

Antronix's multiple output directional taps are available with 2-, 4-, or 8-output taps. The CMDT2000 series directional taps are designed and manufactured for every day low-level signal installation, and for high-level signal applications like cable modems.

- **6 kV Ring Wave Surge Protected**
  All ports are protected against multiple 6 kV ring wave surges per IEEE specification C62.41 Category A3.
- **Excellent Distortion Performance**
  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 such as VoIP and DOCSIS 3.0.
- **Flat 1 GHz Bandwidth with Minimal Insertion Loss**
  Supports present and future multimedia applications including voice, video and data.
- **Multiple Output Directional Taps**
  Provide the solution for system design in a high-density drop location.
- **Directional Coupler and Splitter integrated into a Single Housing**
- **Low Distortion**
  Prevents harmonics from appearing in the forward path due to high-level return path signals.
- **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 reliable and repeatable 120 dB RFI shielding.
- **Flat 15 psi Sealed, SCTE Compliant F-ports**
  Prevents water migration, while meeting SCTE standards.
- **UV Resistant Label**
- **75Ω Nominal Impedence**

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CMCDT2200H/V

Electrical Specifications

2-Way Drop Directional Tap, 1 GHz

Specification	Freq (MHz)	04	08	11	14	17	20	23	26	29
Tap Loss Tolerance Max (+/– dB)	5-15	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	15-40	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	40-200	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	200-550	0.8	1.0	1.0	1.0	1.0	1.2	1.2	1.2	1.2
	550-750	0.8	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3
	750-1002	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Insertion Loss Max (+/– dB)	5-15	–	3.8	2.6	1.2	1.2	1.0	1.0	1.0	1.0
	15-40	–	3.6	2.3	1.0	1.0	0.8	0.8	0.8	0.8
	40-200	–	3.6	2.3	1.3	1.0	0.8	0.8	0.8	0.8
	200-550	–	3.8	2.8	1.3	1.3	1.0	1.0	0.8	0.8
	550-750	–	4.0	3.2	1.8	1.5	1.3	1.2	1.1	1.1
	750-1002	–	4.5	3.6	2.2	2.0	1.5	1.4	1.3	1.3
Output to Tap Isolation Min (dB)	5-15	–	28	28	30	32	32	34	35	38
	15-40	–	35	32	35	35	35	35	38	42
	40-200	–	32	30	32	32	32	32	35	38
	200-550	–	25	25	26	28	28	28	30	35
	550-750	–	22	22	24	25	25	26	28	30
	750-1002	–	22	22	22	23	23	24	25	25
Tap to Tap Isolation Min (dB)	5-15	22	22	22	22	22	22	22	22	22
	15-40	32	32	32	32	32	32	32	32	32
	40-200	30	30	30	30	30	30	30	30	30
	200-550	25	25	25	25	25	25	25	25	25
	550-750	25	25	25	25	25	25	25	25	25
	750-1002	22	22	22	22	22	23	23	23	23
Input/Output Return Loss Min (dB)	5-15	20	20	18	20	20	20	20	20	20
	15-40	28	22	18	20	20	20	20	20	20
	40-200	20	20	18	20	20	20	20	20	20
	200-550	20	20	18	20	20	20	20	20	20
	550-750	20	20	18	20	20	20	20	20	20
	750-1002	20	20	18	20	20	20	20	20	20
Tap Port Return Loss Min (dB)	5-15	20	20	20	20	20	20	20	20	20
	15-40	20	25	25	28	28	28	28	28	28
	40200	20	20	20	20	20	20	20	20	20
	200-550	20	20	20	20	20	20	20	20	20
	550-750	20	20	20	20	20	20	20	20	20
	750-1002	20	20	20	20	20	20	20	20	20

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CMCDT2400H/V

Electrical Specifications

4-Way Drop Directional Tap, 1 GHz

Specification	Freq (MHz)	08	11	14	17	20	23	26	29
Tap Loss Tolerance Max (+/– dB)	5-15	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	15-40	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	40-200	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	200-550	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	550-750	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.2
	750-1002	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Insertion Loss Max (+/– dB)	5-15	–	3.8	2.5	1.4	1.0	1.0	1.0	1.0
	15-40	–	3.6	2.5	1.2	0.8	0.8	0.8	0.8
	40-200	–	3.6	2.5	1.2	0.8	0.8	0.8	0.8
	200-550	–	3.6	2.5	1.4	1.0	0.8	0.8	0.8
	550-750	–	3.8	2.8	1.6	1.2	1.1	1.0	1.0
	750-1002	–	4.1	3.2	2.0	1.4	1.3	1.2	1.2
Output to Tap Isolation Min (dB)	5-15	–	26	28	32	35	35	38	40
	15-40	–	32	35	35	35	35	35	40
	40-200	–	30	32	32	32	32	35	38
	200-550	–	24	26	28	30	32	32	35
	550-750	–	22	22	24	26	28	28	30
	750-1002	–	22	22	24	25	25	25	25
Tap to Tap Isolation Min (dB)	5-15	24	24	24	24	24	24	24	24
	15-40	30	30	30	30	30	30	30	30
	40-200	28	28	28	28	28	28	28	28
	200-550	25	25	25	25	25	25	25	25
	550-750	25	25	25	25	25	25	25	25
	750-1002	22	22	22	22	22	22	22	22
Input/Output Return Loss Min (dB)	5-15	20	20	20	20	20	20	20	20
	15-40	20	22	20	22	22	22	22	22
	40-200	20	20	20	20	20	20	20	20
	200-550	20	20	20	20	20	20	20	20
	550-750	20	20	20	20	20	20	20	20
	750-1002	20	20	20	20	20	20	20	20
Tap Port Return Loss Min (dB)	5-15	20	20	20	20	20	20	20	20
	15-40	26	26	26	26	26	26	26	26
	40-200	22	22	22	22	22	22	22	22
	200-550	20	20	20	20	20	20	20	20
	550-750	20	20	20	20	20	20	20	20
	750-1002	20	20	20	20	20	20	20	20

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CMCDT2800H/V

Electrical Specifications

8-Way Drop Directional Tap, 1 GHz

Specification	Freq (MHz)	12	15	18	21	24	27	30	33	36
Tap Loss Tolerance Max (+/– dB)	5-15	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	15-40	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	40-200	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	200-550	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	550-750	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.2	1.2
	750-1002	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Insertion Loss Max (+/– dB)	5-15	–	3.8	2.6	1.4	1.2	1.0	1.0	1.0	1.0
	15-40	–	3.6	2.4	1.2	1.0	0.8	0.8	0.8	0.8
	40-200	–	3.6	2.4	1.2	1.0	0.8	0.8	0.8	0.8
	200-550	–	3.6	2.4	1.2	1.0	0.8	0.8	0.8	0.8
	550-750	–	3.8	2.8	1.5	1.2	1.0	1.0	1.0	1.0
	750-1002	–	4.1	3.0	2.0	1.4	1.2	1.2	1.2	1.2
Output to Tap Isolation Min (dB)	5-15	–	32	35	35	35	40	40	42	45
	15-40	–	35	35	35	38	40	45	45	45
	40-200	–	32	32	32	34	35	35	38	40
	200-550	–	30	30	30	32	32	32	34	36
	550-750	–	28	30	30	30	30	30	32	35
	750-1002	–	28	30	30	30	30	30	32	35
Tap to Tap Isolation Min (dB)	5-15	24	24	24	24	24	24	24	24	24
	15-40	30	30	30	30	30	30	30	30	30
	40-200	26	26	26	26	26	26	26	26	26
	200-550	25	25	25	25	25	25	25	25	25
	550-750	25	25	25	25	25	25	25	25	25
	750-1002	22	22	22	22	22	22	22	22	22
Input/Output Return Loss Min (dB)	5-15	18	18	18	18	18	18	18	18	18
	15-40	20	20	20	20	20	20	20	20	20
	40-200	20	20	20	20	20	20	20	20	20
	200-550	20	20	20	20	20	20	20	20	20
	550-750	20	20	20	20	20	20	20	20	20
	750-1002	20	20	20	20	20	20	20	20	20
Tap Port Return Loss Min (dB)	5-15	20	20	20	20	20	20	20	20	20
	15-40	25	25	25	25	25	25	25	25	25
	40200	22	22	22	22	22	22	22	22	22
	200-550	20	20	20	20	20	20	20	20	20
	550-750	20	20	20	20	20	20	20	20	20
	750-1002	20	20	20	20	20	20	20	20	20

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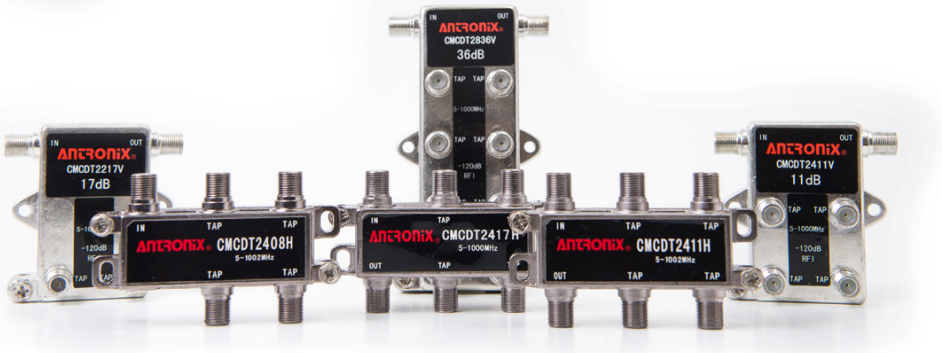
CMCDT2000H/V Series

General	
Impedance	75 Ω
Spurious Signals	-45 dBmV, after 6 KV Ring Wave Surge
Including 2nd Harmonics	Measuring with a 55 dBmV Return Input Carrier
Environmental	
Waterproof Test (min)	15 psi
RFI (min)	120 dB
Surge Protection	6 kV Ring Wave Surge per IEEE C62.41 Category A3

Ordering Information

CMCDT2XYYZ

- Style
  - H - Horizontal
  - V - Vertical
- Tap Value
- No. of Ports
  - 2-2 Port
  - 4-4 Port
  - 8-8 Port
- Directional Tap Series



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