

CMCDT2100 Series

1 GHz Directional Taps



Overview

The CMCDT2100 Series Directional Taps provide users with a variety of installation options. The L-style housing (above, left) is perfect for in-wall installations where dimensions have been minimized by removing the mounting tabs. The T-style housing (above, right) includes a mounting tab. Both styles are SCTE compliant.

The Antronix CMCDT2100 Series directional taps have been designed with today's two-way broadband networks in mind. Our proprietary ferrites resist re-magnetization and remain ultra linear for consistent performance throughout its lifetime.

Additionally, our directional couplers are among the most robust in the industry. Every port on each directional coupler is 6 kV ring wave protected. To ensure years of reliable operation, the couplers are encased in a Zinc Alloy diecast housing, plated with a proprietary Nickel Alloy which provides superior protection versus tin-plating. Each port is sealed to 15 psi to prevent water migration and are spaced at 1 inch (L-style) per SCTE specification.

Features/Benefits:

- **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
- **Flat 1 GHz bandwidth with minimal insertion loss**
Supports present and future multimedia applications including voice, video and data
- **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 percent soldered back**
Ensures reliable & repeatable 120 dB RFI shielding
- **Flat, 15 psi sealed, SCTE compliant F-ports**
Prevents water migration, while meeting SCTE standards
- **UV resistant Label**
- **Integrated mounting tabs**
The T-style housing incorporates the mounting tab
- **75 Ohm nominal impedance**

Electrical Specifications

Model Number	CMCDT	2104	2106	2109	2112	2116	2120	2124	2127	2130
Tap Value	Freq (MHz)	4	6	9	12	16	20	24	27	30
Tap Loss Tolerance										
(± dB)	Nominal	4	6	9	12	16	20	24	27	30
	5-14	0.8	1.8	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
	41-200	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	201-550	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	551-750	1.0	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	751-1000	1.2	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Insertion Loss										
(dB max)	5-14	3.5	2.6	1.6	1.0	1.0	0.6	0.6	0.6	0.6
	15-40	3.6	2.5	1.6	0.8	0.8	0.6	0.6	0.6	0.6
	41-200	3.7	2.6	1.7	1.0	0.8	0.8	0.6	0.6	0.6
	201-550	3.8	2.6	1.7	1.0	1.0	0.8	0.8	0.8	0.8
	551-750	3.8	2.8	2.0	1.2	1.0	1.0	0.8	0.8	0.8
	751-1000	4.2	3.2	2.3	1.5	1.3	1.3	1.3	1.3	1.3
Isolation										
(dB min)	5-14	22	24	25	25	30	33	38	40	42
	15-40	35	33	33	35	35	40	40	45	45
	41-200	28	24	28	28	30	32	32	35	38
	201-550	25	22	25	28	28	30	30	32	34
	551-750	25	22	23	25	26	28	28	30	32
	751-1000	22	20	20	22	24	26	28	30	32
Input RL										
(dB min)	5-14	20	20	20	20	20	20	20	20	20
	15-40	24	25	20	25	25	25	25	25	25
	41-200	20	20	20	20	20	20	20	20	20
	201-550	20	20	20	20	20	20	20	20	20
	551-750	20	20	20	20	20	20	20	20	20
	751-1000	20	20	20	20	20	20	20	20	20
Output RL										
(dB min)	5-14	20	20	20	20	20	20	20	20	20
	15-40	33	28	28	30	30	30	30	30	30
	41-200	22	20	20	20	20	22	22	22	22
	201-550	20	20	20	20	20	20	20	20	20
	551-750	20	20	20	20	20	20	20	20	20
	751-1000	20	20	20	20	20	20	20	20	20
Tap RL										
(dB)	5-14	20	20	20	20	20	20	20	20	20
	15-40	33	28	30	30	30	30	30	30	30
	41-200	22	20	20	20	20	22	22	22	22
	201-550	20	20	20	20	20	20	20	20	20
	551-750	20	20	20	20	20	20	20	20	20
	751-1000	20	20	20	20	20	20	20	20	20
RFI										
(dB min)	5-1000	120	120	120	120	120	120	120	120	120

Specifications subject to change without notice