Features and Benefits

ANTRONIX®

CEH E-Option Plug-In Conditioners

Cable Equalizers-Conditioning at the Tap

Milenium NXT Series 2.0 GHz Plug-ins

Antronix E-Option conditioning 2 GHz MHT series mult-itaps accommodate a variety of plug-in modules that provide signal conditioning in either the downstream or upstream for optimum system performance. E-Option allows each tap location to be conditioned individually affecting only the tap ports without impacting the through insertion loss. E-Option solves design challenges such as high/low passive return loss, negative/positive tilt compensation and return path ingress and noise reduction.

- **Compact Size**
  One plug-in affects all tap ports equally while not affecting the through port.
- **Compatible with Antronix 2 GHz MHT Milenium NXT 2.0 series Multi-taps**
- **Cable Equalizers (CEH) 5-2000 MHz**
  It equalizes the legacy and extended frequency bands to compensate for excessive negative tilt usually occurring at the end of the transmission line.
- **Does not affect the through path of the Multi-tap**

- **Advantages:**

  The CEH is used to equalize the entire bandwidth from 5 to 2000MHz.

  The cable equalizer is normally used on taps towards the end of the lines.

  It equalizes the full bandwidth to overcome excessive negative tilt associated with long coaxial lines allowing modems to operate at a higher output and lowers the noise and ingress coming from the customer's premise, thus achieving a greater signal to noise/ingress ratio in the return path

  It conditions the tap ports for the correct signal levels for proper set top operation and to meet FCC specifications.

  It is available in a variety of values to meet your needs.

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Electrical Specifications
2 GHz Cable Equalizer Filter Plug In (CEH)

		CEH-02	CEH-04	CEH-06	CEH-08	CEH-10	CEH-12	CEH-14	CEH-16	CEH-18	CEH-20	CEH-22
Bandwidth (MHz)		**5-2000**										
Cable Equalizer (dB)		2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0
Insertion Loss (dB Typ)	5	2.5	3.9	6.0	7.8	10.1	12.0	13.9	15.5	17.9	20.0	22.3
	50	2.5	3.9	6.0	7.8	10.0	11.9	13.8	15.4	17.6	19.7	21.7
	85	2.5	3.9	6.0	7.7	9.9	11.7	13.7	15.2	17.3	19.2	20.8
	102	2.5	3.9	6.0	7.7	9.8	11.6	13.6	15.1	17.1	18.9	20.3
	204	2.5	3.9	5.9	7.4	9.2	10.7	13.1	14.1	15.6	16.6	17.3
	258	2.5	3.9	5.8	7.2	8.9	10.2	12.7	13.5	14.8	15.5	15.9
	300	2.5	3.8	5.8	7.1	8.6	9.8	12.3	13.0	14.0	14.6	14.8
	396	2.4	3.7	5.6	6.7	8.0	8.9	11.5	11.9	12.5	12.7	12.8
	450	2.4	3.6	5.5	6.5	7.6	8.5	10.9	11.2	11.6	11.8	11.8
	550	2.3	3.4	5.2	6.2	7.0	7.7	10.0	10.0	10.2	10.3	10.2
	684	2.2	3.2	4.8	5.8	6.3	6.7	8.7	8.5	8.5	8.5	8.3
	750	2.1	3.0	4.6	5.5	5.9	6.2	8.0	7.8	7.7	7.7	7.5
	870	2.0	2.7	4.3	5.0	5.3	5.4	7.0	6.7	6.5	6.5	6.3
	1002	1.8	2.4	3.8	4.6	4.6	4.6	5.8	5.5	5.3	5.3	5.1
	1218	1.3	1.9	3.1	3.6	3.6	3.4	4.2	3.9	3.6	3.7	3.5
	1600	1.0	1.3	1.6	1.6	1.6	1.5	1.9	1.8	1.5	1.6	1.9
	1794	1.0	1.1	1.0	0.9	1.0	0.9	1.2	1.1	0.9	1.0	1.5
	2000	1.1	1.2	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.8	0.8

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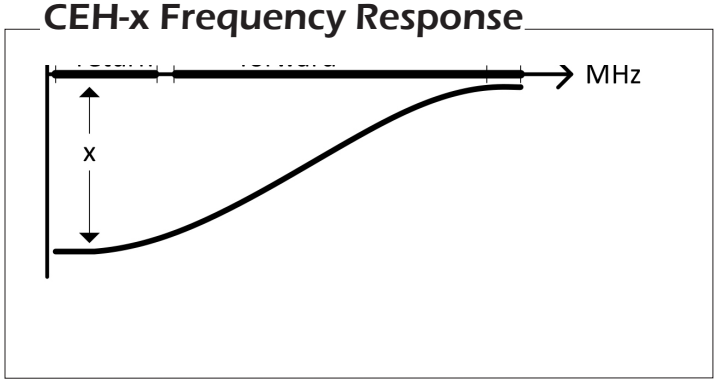
CEH-x Frequency Response



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Bandwidth (MHz)		5-2000										
Cable Equalizer (dB)		2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	22.0
Insertion Loss (dB Max)	5	2.9	4.2	6.4	8.2	10.5	12.4	14.5	16.3	18.3	20.5	22.8
	50	2.9	4.2	6.4	8.2	10.5	12.4	14.5	16.3	18.3	20.5	22.8
	85	2.9	4.2	6.4	8.1	10.4	12.2	14.4	16.0	17.9	19.9	21.9
	102	2.9	4.2	6.4	8.1	10.2	12.0	14.2	15.9	17.6	19.6	21.5
	204	2.8	4.2	6.2	7.7	9.6	11.2	13.6	15.0	16.3	17.7	18.9
	258	2.8	4.2	6.2	7.5	9.3	10.8	13.3	14.5	15.5	16.7	17.5
	300	2.7	4.1	6.1	7.4	9.1	10.5	13.0	14.1	15.0	16.0	16.7
	396	2.6	4.0	5.8	7.1	8.6	9.7	12.3	13.2	13.6	14.2	14.7
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	750	2.3	3.4	5.0	6.0	6.8	7.0	9.0	9.2	8.5	8.8	9.0
	870	2.2	3.1	4.6	5.5	6.2	6.2	8.0	8.0	7.2	7.5	8.0
	1002	2.1	2.9	4.2	5.0	5.5	5.5	6.8	6.8	6.0	6.2	6.8
	1218	1.9	2.5	3.5	4.3	4.3	4.3	5.0	5.0	4.2	4.5	5.0
	1600	1.7	1.8	2.2	2.5	2.5	2.5	2.5	2.5	2.0	2.3	2.5
	1794	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	2000	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Return Loss (dB Min)	5-10	16	16	16	16	16	16	16	16	16	16	16
	10-800	16	16	16	16	16	16	16	16	16	16	16
	800-1002	15	15	15	15	15	15	15	15	15	15	15
	1002-1218	15	15	15	15	15	15	15	15	15	15	15
	1218-1794	15	15	15	15	15	15	15	15	15	15	15
	1794-2000	15	15	15	15	15	15	15	15	15	15	15

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