Features and Benefits

ANTRONIX®

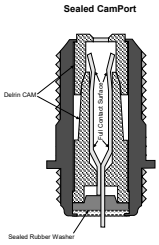
MGT2000-SDPE-G2 1.2 GHz
Milenium Drop Power Multi-Tap

Optimized for next generation HFC architectures, the Antronix Milenium MGT2000-SDPE-G2 series 1.2 GHz multi-taps add 1218 MHz bandwidth performance to the Milenium Drop Power Line of Multi-Taps, and lead the CATV industry in performance and reliability. The Antronix Milenium MGT2000-SDPE-G2 series multi-tap is the preferred drop power multi-tap for WiFi access point powering applications. Each tap has an Easy Access Compartment (EAC) to individually activate power down each drop via an activation jumper or a current limiter. The MGT2000-SDPE-G2 series multi-tap provides low insertion loss and features Antronix's patented CamPort® and E-Option signal conditioning plug-in. All Milenium multi-taps mate to the Antronix USP baseplate for continuous video, data, telephony, and power during faceplate changes*.

The unmatched flexibility of the Milenium series multi-taps allows system engineers to adapt existing designs to new requirements expediently and without a complete system redesign. The Milenium series multi-tap can quickly and easily be upgraded for WiFi powering or subscriber powering with a simple faceplate exchange.

The innovative E-Option signal-conditioning multi-tap solves many network problems through a creative plug-in. A single plug-in can help improve signal-to-noise while suppressing ingress. Never before has adapting a system to meet the needs of WiFi, VOD, VoIP, digital and data been so simple. A variety of E-Option signal conditioning plug-ins are available to condition either, or both, the return path and forward path. The E-Options will save you money and time while adapting your system to today's broadband requirements.

- **Drop Powering for WiFi and NIU Power**
  High drop power current rating for power hungry applications
- **Extended Surge Protection**
  6 kV Combination Wave surge withstand on all ports
- **E-Option Drop Signal Conditioning Standard** Patent no. 6,570,465 B2
  E-Option allows the signal conditioning at the tap to meet any network needs. Plug-in modules include:
  CEG – Cable Equalizer
  CSG – Cable Simulator
  RAG – Return Path Attenuator
  HP – High Pass Filter
  HTG – High Tap Value Filter
- **Patented USP Bypass Switch**
  Provides uninterrupted signal and power during faceplate changes
- **CamPort® Sealed, Auto-Seizing F-ports**
  >2000 grams seizing force on the center pin of the F-connector
- **Rotational Seizure Posts**
  One tap housing for either aerial or pedestal configuration
- **Four Stage Corrosion Protection Process**
  A 360 Aluminum alloy housing
  Housing is impregnated with a sealer to prevent porosity
  Clear chromate coating inside and out
  Double baked-on coating of polyurethane for superior protection
- **Heat-Treated Stainless Steel Hardware with Proprietary Plating**
  Reduces galvanic reactions and provides superb corrosion protection
- **Integrated Drip Wells, Numbered Ports and Strip Gauge**
  Provided to simplify installation and eliminate costly errors and additional truck rolls
- **Ribbed Main Line Entry Ports**
  Ensures proper adhesion of head shrink tubing for reliable mainline connections
- **Backwards Compatible Faceplates***
  Most faceplates are backwards compatible with all Milenium multi-tap housings



Specifications subject to change without notice

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Electrical Specifications

MGT2200-SDPE-G2 1.2GHz Drop Power Taps

Tap Value (dB)	**MGT** (dB)	04		08		11		14		17		20		23		26		29		32	
Frequency (MHz)																					
Tap Loss Tolerance (+/-dB)	5-19	1.5		1.5		1.5		1.5		1.5		2.0		2.0		1.5		1.5		1.5	
	20-899	2.0		2.0		2.0		1.5		1.5		1.5		1.5		2.0		2.0		2.0	
	900-1000	2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0	
	1001-1218	2.5		3.0		2.5		2.5		2.5		2.5		2.5		2 .5		2.5		2.5	
		Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg
Insertion Loss Max/Avg (dB)	5	—	—	4.1	3.9	2.0	1.7	1.3	1.0	1.2	0.8	1.0	0.6	0.7	0.4	0.7	0.4	0.7	0.4	0.7	0.4
	10	—	—	3.6	3.4	1.8	1.4	1.2	0.8	1.1	0.6	0.9	0.5	0.6	0.3	0.6	0.3	0.6	0.4	0.6	0.3
	30	—	—	3.5	3.4	1.8	1.4	1.2	0.8	1.1	0.6	0.9	0.5	0.6	0.3	0.6	0.3	0.6	0.4	0.6	0.3
	50	—	—	3.5	3.2	1.8	1.3	1.2	0.8	1.1	0.6	0.9	0.5	0.7	0.3	0.7	0.3	0.7	0.4	0.7	0.3
	100	—	—	3.8	3.4	2.0	1.4	1.3	0.9	1.2	0.8	1.1	0.7	0.9	0.5	0.9	0.5	0.9	0.5	0.9	0.5
	330	—	—	4.2	3.9	2.2	1.9	1.5	1.3	1.4	1.1	1.3	1.0	1.1	0.8	1.1	0.8	1.1	0.8	1.1	0.8
	450	—	—	4.3	4.1	2.4	2.1	1.6	1.4	1.5	1.2	1.3	1.1	1.1	0.9	1.1	0.9	1.1	1.0	1.1	0.9
	600	—	—	4.3	4.0	2.5	2.1	1.8	1.5	1.5	1.3	1.4	1.2	1.2	1.0	1.2	1.0	1.2	1.0	1.2	1.0
	750	—	—	4.3	4.0	2.6	2.3	1.9	1.7	1.5	1.4	1.5	1.2	1.3	1.1	1.3	1.1	1.3	1.1	1.3	1.0
	860	—	—	4.4	3.9	2.7	2.5	2.0	1.8	1.6	1.4	1.6	1.3	1.4	1.1	1.4	1.1	1.4	1.2	1.4	1.1
	1000	—	—	4.5	3.7	3.0	2.6	2.3	1.9	1.6	1.4	1.7	1.3	1.6	1.2	1.6	1.2	1.6	1.3	1.6	1.2
	1218	—	—	5.2	4.2	3.6	2.9	2.7	2.1	2.2	1.6	2.1	1.5	2.0	1.4	2.0	1.5	2.0	1.6	2.0	1.5
Output to Tap Isolation Min (dB)	5-9	—		20		20		22		26		29		32		35		38		40	
	10-749	—		21		24		26		30		33		36		38		40		42	
	750-899	—		20		22		23		28		31		34		36		38		40	
	900-1218	—		20		21		22		26		29		31		33		35		37	
Tap to Tap Isolation Min (dB)	5-9	20		20		20		20		20		20		20		20		20		20	
	10-250	25		25		25		25		25		25		25		25		25		25	
	251-749	23		23		23		23		23		23		23		23		23		23	
	750-1218	20		20		20		20		20		20		20		20		20		20	
Input/Output Return Loss Min (dB)	5-9	17		18		18		18		18		18		18		18		18		18	
	10-749	18		17		18		18		18		18		18		18		18		18	
	750-999	17		16		17		17		17		17		17		17		17		17	
	1000-1218	16		16		16		16		16		16		16		16		16		16	
Tap Port Return Loss Min (dB)	5-9	18		17		17		18		18		18		18		18		18		18	
	10-749	18		18		18		18		18		18		18		18		18		18	
	750-999	17		17		17		17		17		17		17		17		17		17	
	1000-1218	16		16		16		16		16		16		16		16		16		16	
Hum Mod @ 10 Amps Max (dB)	5-750	—		-65		-65		-65		-65		-65		-65		-65		-65		-65	
	751-1218	—		-60		-60		-60		-60		-60		-60		-60		-60		-60	

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Electrical Specifications

MGT2400-SDPE-G2 1.2GHz Drop Power Tap

Tap Value	MGT (dB)	08		11		14		17		20		23		26		29		32		35	
Frequency (MHz)																					
Tap Loss Tolerance (+/-dB)	5-29	1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5	
	30-899	1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5		1.5	
	900-1000	2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0		2.0	
	1001-1218	3.0		3.0		2.5		2.5		2.5		2.5		2.5		2.5		2.5		2.5	
		Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg
Insertion Loss Max/Avg (dB)	5	—	—	4.0	3.8	2.0	1.6	1.3	1.1	1.3	1.0	1.2	0.7	0.9	0.4	0.9	0.4	0.8	0.4	0.8	0.4
	10	—	—	3.8	3.4	1.9	1.3	1.2	1.0	1.2	0.8	1.0	0.6	0.8	0.3	0.8	0.4	0.7	0.4	0.7	0.4
	30	—	—	3.8	3.2	1.5	1.3	1.2	0.9	1.2	0.8	1.0	0.5	0.8	0.3	0.8	0.3	0.8	0.3	0.8	0.3
	50	—	—	3.9	3.2	1.8	1.3	1.2	0.9	1.2	0.8	1.0	0.5	0.9	0.3	0.9	0.3	0.9	0.3	0.9	0.3
	100	—	—	4.0	3.3	2.0	1.4	1.3	1.0	1.2	0.9	1.1	0.6	1.0	0.4	1.0	0.4	1.0	0.4	1.0	0.4
	330	—	—	4.3	4.0	2.2	1.9	1.6	1.5	1.4	1.3	1.3	1.1	1.1	0.9	1.1	0.9	1.0	0.8	1.0	0.8
	450	—	—	4.3	4.0	2.4	2.1	1.7	1.5	1.6	1.4	1.3	1.1	1.1	0.9	1.1	0.9	1.1	0.9	1.1	0.9
	600	—	—	4.7	4.2	2.6	2.3	1.9	1.6	1.7	1.4	1.5	1.2	1.2	1.0	1.2	1.0	1.2	1.0	1.2	1.0
	750	—	—	4.8	4.1	2.8	2.5	2.0	1.7	1.8	1.5	1.6	1.3	1.4	1.1	1.4	1.1	1.4	1.0	1.4	1.0
	860	—	—	4.9	4.1	3.0	2.8	2.2	1.9	2.0	1.7	1.8	1.4	1.6	1.2	1.6	1.3	1.6	1.2	1.6	1.2
	1000	—	—	5.1	4.3	3.4	3.0	2.5	2.1	2.0	1.7	1.8	1.6	1.8	1.3	1.8	1.4	1.8	1.3	1.8	1.3
	1218	—	—	5.8	5.5	4.1	3.8	3.0	2.7	2.5	2.3	2.2	2.0	2.1	1.9	2.1	2.0	2.1	1.9	2.1	1.9
Output to Tap Isolation Min (dB)	5-9	—		20		22		26		30		30		32		34		36		38	
	10-749	—		23		25		28		34		36		38		40		42		44	
	750-899	—		22		25		28		32		34		36		38		40		42	
	900-1218	—		22		25		28		30		32		34		36		38		40	
Tap to Tap Isolation Min (dB)	5-9	20		20		20		20		20		20		20		20		20		20	
	10-250	25		25		25		25		25		25		25		25		25		25	
	251-749	23		23		23		23		23		23		23		23		23		23	
	750-1218	20		20		20		20		20		20		20		20		20		20	
Input/Output Return Loss Min (dB)	5-29	17		18		18		18		18		18		18		18		18		18	
	30-599	16		16		16		17		17		17		17		17		17		17	
	600-999	15		15		16		16		16		16		16		16		16		16	
	1000-1218	15		15		16		16		16		16		16		16		16		16	
Tap Port Return Loss Min (dB)	5-9	17		17		17		17		17		17		17		17		17		17	
	10-749	17		17		17		17		17		17		17		17		17		17	
	750-999	16		16		16		16		16		16		16		16		16		16	
	1000-1218	16		16		16		16		16		16		16		16		16		16	
Hum Mod @ 10 Amps Max (dB)	5-750	—		-65		-65		-65		-65		-65		-65		-65		-65		-65	
	751-1218	—		-60		-60		-60		-60		-60		-60		-60		-60		-60	

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Electrical Specifications

MGT2800-SDPE-G2 1.2GHz Drop Power Tap

Tap Value	**MGT** (dB)	12		15		18		21		24		27		30	
Frequency (MHz)															
Tap Loss Tolerance (+/-dB)	5-19	2.0		2.5		2.0		2.0		2.0		2.0		2.0	
	20-899	2.0		2.5		2.0		2.0		2.0		2.0		2.2	
	900-1000	2.5		2.5		2.5		2.5		2.5		2.5		2.5	
	1001-1218	3.5		3.5		3.5		3.5		3.5		3.5		3.5	
		Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg
Insertion Loss Max/Avg (dB)	5	—	—	4.0	3.8	2.0	1.6	1.4	1.0	1.1	0.7	0.8	0.5	0.6	0.3
	10	—	—	3.8	3.4	1.8	1.3	1.3	0.8	1.0	0.6	0.7	0.4	0.5	0.3
	30	—	—	3.7	3.2	1.8	1.3	1.3	0.7	1.0	0.6	0.7	0.4	0.5	0.3
	50	—	—	3.8	3.2	1.8	1.3	1.3	0.7	1.0	0.6	0.7	0.4	0.5	0.3
	100	—	—	3.9	3.4	2.0	1.4	1.4	0.9	1.2	0.8	1.1	0.6	0.9	0.5
	330	—	—	4.4	4.0	2.2	1.9	1.6	1.3	1.3	1.1	1.3	1.0	1.2	0.8
	450	—	—	4.4	4.1	2.4	2.0	1.7	1.4	1.4	1.2	1.4	1.0	1.2	0.8
	600	—	—	4.6	4.3	2.6	2.2	1.9	1.5	1.5	1.3	1.4	1.1	1.2	1.0
	750	—	—	4.6	4.2	2.8	2.3	2.0	1.6	1.6	1.4	1.5	1.2	1.3	1.0
	860	—	—	4.6	4.0	2.9	2.5	2.2	1.8	1.8	1.5	1.6	1.3	1.4	1.1
	1000	—	—	4.6	3.9	3.1	2.8	2.4	2.0	2.0	1.6	1.7	1.4	1.6	1.3
	1218	—	—	5.3	4.9	3.7	3.2	2.9	2.5	2.4	2.0	2.2	1.8	2.0	1.7
Output to Tap Isolation Min (dB)	5-9	—		23		25		28		30		34		36	
	10-749	—		25		30		32		34		36		38	
	750-899	—		25		27		29		32		34		36	
	900-1218	—		23		26		28		29		30		32	
Tap to Tap Isolation Min (dB)	5-9	20		20		20		20		20		20		20	
	10-250	25		25		25		25		25		25		25	
	251-749	23		23		23		23		23		23		23	
	750-1218	20		20		20		20		20		20		20	
Input/Output Return Loss Min (dB)	5-9	18		18		18		18		18		18		18	
	10-749	17		17		17		17		17		17		17	
	750-999	17		17		17		17		17		17		17	
	1000-1218	16		16		16		16		16		16		16	
Tap Port Return Loss Min (dB)	5-9	18		18		18		18		18		18		18	
	10-749	18		18		18		18		18		18		18	
	750-999	17		17		17		17		17		17		17	
	1000-1218	16		16		16		16		16		16		16	
Hum Mod @ 10 Amps Max (dB)	5-750	—		-65		-65		-65		-65		-65		-65	
	751-1218	—		-60		-60		-60		-60		-60		-60	

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Specifications
Milenium Drop Power Multi-Tap

General	
Nominal Impedance	75 Ω
F-connector Type	ANSI/SCTE-01 Compliant CamPort® F-port
Surge Withstand	6 kV Combination Wave Surge per IEEE C62.41 Category B3 on all Ports
Power Rating	12 Amps Continuous (In to Out), 2 Amps Continuous (In to Tap)
RFI	110 dB (min)
Environmental	
Pressure Seal	15 psi
Operating Temperature	-40 °C to 60 °C
Corrosion Resistance	Meets ANSI/SCTE Specification

Ordering Information

MGT2XYY-SDPE-Z-G2

- 1.2 GHz 6 kV Combination Wave Surge on all Ports
- Tap Type
  P - Faceplate only
  U - w/USP Housing
- E-Option Tap w/EAC
- Tap Value*
- No. of Ports
  2-2 Port
  4-4 Port
  8-8 Port
- Milenium Series

Model Numbers (MGT2abb)*				Color Code	
No. of Ports (a)	2	4	8		
***Tap Value** (bb)	04	-	-	Green	
	08	08	-	Black	
	11	11	12	Gold	
	14	14	15	Royal Blue	
	17	17	18	Dark Blue	
	20	20	21	Dark Orange	
	23	23	24	Light Orange	
	26	26	27	Red	
	29	29	30	Purple	
	32	32	33	Hot Pink Red	
	-	35	36	Green	
	-	-	39	Black	

Table 1. Tap Value Color Codes

Accessory Ordering Guide

CL-JMP	Activation Jumper

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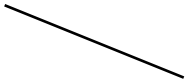
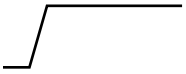
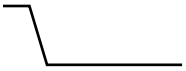
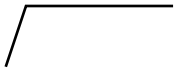
E-Option Plug-in Conditioner

Ordering Matrix Milenium Drop Power Multi-Tap

Plug in Conditioner	(XXX)	Filter Shape	Conditioner Value (YY)
Cable Equalizer	CEG		02, 04, 06, 08, 10, 12, 14 or 16 (dB) (Equalization at 1002 MHz)
Cable Simulator	CSG		03, 06, 09 or 12 (dB) (Cable simulation at 1002 MHz)
Return Path Attenuator	RAG		02, 04, 06, 08, 10, 12, 14, 16 or 18 (dB)
High Tap Filter	HTG		03, 06, 09, 12 or 15 (dB)
High Pass Filter	HP		54 (MHz)
Jumper**	JP		–

** Jumper (JP) is shipped with all E-Option taps unless requested. Patent no 6,570,465 B2

Related Documents	
Description	**Document Number**
E-Option Application Note	AN-1007

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