

Features and Benefits

ANTRONIX®

MGT2000-SDPE Milenium Drop Power Multi-Tap

The Antronix Milenium MGT2000-SDPE 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 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 increase 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 main line ports. 6 kV Ring Wave surge withstand on all tap 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:

CE – Cable Equalizer CS – Cable Simulator
RA – Return Path Attenuator HP – High Pass Filter
HT – High Tap Value Filter

- **Patented USP Bypass Switch**

Provides continuous 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**

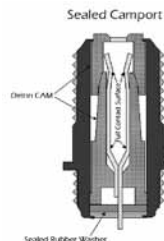
Provided to simplify installation and eliminate costly errors and additional truck rolls

- **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



Electrical Specifications

MGT2200-SDPE Milenium Drop Power Multi-Tap

Model Tap Value	MGT (dB)	2204 4.0	2208 8.5	2211 11.0	2214 14.0	2217 17.0	2220 20.0	2223 23.0	2226 26.0	2229 29.0	2232 32.0									
Frequency (MHz)																				
Tap Loss Tolerance																				
(dB)	5-20	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0									
	20-900	1.5	1.5	1.5	1.7	1.5	1.5	1.5	1.5	1.5	1.5									
	900-1002	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0									
Insertion Loss																				
		Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg							
Maximum/Average (dB)	5	—	—	3.8	3.0	2.0	1.5	1.4	0.9	1.2	0.7	0.9	0.5	0.9	0.4	0.7	0.4	0.7	0.4	
	30-50	—	—	3.5	2.7	1.6	1.2	1.2	0.7	1.0	0.6	0.7	0.4	0.7	0.4	0.6	0.4	0.6	0.4	
	100	—	—	3.6	2.9	1.6	1.2	1.2	0.8	1.0	0.6	0.8	0.5	0.8	0.4	0.6	0.4	0.6	0.4	
	300	—	—	4.0	3.6	1.9	1.6	1.3	1.1	1.2	1.0	1.1	0.9	1.0	0.7	1.0	0.8	1.0	0.8	
	450	—	—	4.2	3.9	2.2	1.9	1.5	1.3	1.3	1.1	1.1	0.9	1.0	0.8	1.0	0.8	1.0	0.8	
	550	—	—	4.4	4.0	2.5	2.1	1.7	1.4	1.4	1.3	1.3	1.1	1.2	0.9	1.2	1.0	1.2	1.0	
	750	—	—	4.8	4.0	3.0	2.5	1.9	1.7	1.6	1.5	1.5	1.3	1.4	1.2	1.4	1.2	1.4	1.2	
	870	—	—	4.9	4.1	3.3	2.5	2.2	1.9	1.8	1.6	1.7	1.4	1.6	1.4	1.6	1.4	1.6	1.4	
1002	—	—	5.0	4.8	3.7	2.6	2.6	2.1	2.1	1.7	1.9	1.5	1.9	1.5	1.8	1.5	1.8	1.5		
Output to Tap Isolation																				
Minimum (dB)	5-10	—	—	20	—	20	—	20	—	24	—	28	—	30	—	32	—	34	—	36
	10-750	—	—	21	—	23	—	24	—	30	—	33	—	36	—	38	—	40	—	42
	750-900	—	—	20	—	22	—	23	—	28	—	31	—	34	—	36	—	38	—	40
	900-1002	—	—	20	—	21	—	22	—	27	—	30	—	32	—	34	—	36	—	38
Tap to Tap Isolation																				
Minimum (dB)	5-20	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20
	20-750	23	—	23	—	23	—	23	—	23	—	23	—	23	—	23	—	23	—	23
	750-900	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20
	900-1002	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20
Input/Output Return Loss																				
Minimum (dB)	5-30	16	—	16	—	16	—	16	—	17	—	17	—	16	—	17	—	17	—	17
	30-600	17	—	16	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
	600-1002	17	—	15	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
Tap Port Return Loss																				
Minimum (dB)	5-10	17	—	16	—	17	—	16	—	17	—	17	—	17	—	17	—	17	—	17
	10-30	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
	30-750	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
	750-1002	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
Hum Mod @ 12 Amps																				
Minimum (dB)	5-50	—	—	64	—	64	—	70	—	70	—	70	—	70	—	70	—	70	—	70
	50-600	—	—	70	—	70	—	70	—	70	—	70	—	70	—	70	—	70	—	70
	600-750	—	—	64	—	64	—	70	—	70	—	70	—	70	—	70	—	70	—	70
	750-1002	—	—	60	—	60	—	70	—	70	—	70	—	70	—	70	—	70	—	70

Specifications subject to change without notice

Electrical Specifications

MGT2400-SDPE Milenium Drop Power Multi-Tap

Model Tap Value	MGT (dB)	2408 8.0	2411 11.5	2414 14.0	2417 17.0	2420 20.0	2423 23.0	2426 26.0	2429 29.0	2432 32.0								
Frequency (MHz)																		
Tap Loss Tolerance																		
(dB)	5-30	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0								
	30-900	1.5	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5								
	900-1002	1.5	2.5	2.0	2.2	2.0	2.0	2.0	2.0	2.0								
Insertion Loss																		
		Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg			
Maximum/Average (dB)	5	—	—	4.1	3.1	2.0	1.5	1.3	0.9	1.2	1.0	0.9	0.5	0.9	0.5	0.9	0.5	
	30-50	—	—	3.6	3.2	1.6	1.2	1.0	0.7	1.0	0.7	0.7	0.4	0.7	0.3	0.7	0.3	
	100	—	—	3.8	3.3	1.6	1.3	1.0	0.8	1.0	0.8	0.8	0.5	0.8	0.3	0.8	0.3	
	300	—	—	4.1	3.9	2.0	1.7	1.3	1.1	1.3	1.2	1.1	0.9	0.9	0.7	0.9	0.7	
	450	—	—	4.3	4.1	2.3	2.1	1.4	1.2	1.5	1.3	1.2	1.1	1.0	0.8	1.0	0.8	
	550	—	—	4.4	4.2	2.6	2.4	1.6	1.4	1.6	1.5	1.4	1.2	1.1	0.9	1.1	0.9	
	750	—	—	4.8	4.6	3.0	2.8	2.0	1.8	1.8	1.7	1.6	1.3	1.4	1.0	1.4	1.0	
	870	—	—	4.8	4.6	3.3	3.1	2.2	1.9	1.9	1.8	1.7	1.4	1.6	1.1	1.6	1.1	
1002	—	—	4.8	4.6	3.7	3.1	2.5	2.0	2.3	2.0	2.0	1.9	1.8	1.5	1.8	1.5		
Output to Tap Isolation																		
Minimum (dB)	5-10	—	—	20	—	20	—	20	—	25	—	30	—	32	—	34	—	36
	10-750	—	—	23	—	25	—	28	—	34	—	36	—	38	—	40	—	42
	750-900	—	—	22	—	25	—	28	—	32	—	34	—	36	—	38	—	40
	900-1002	—	—	22	—	25	—	28	—	30	—	32	—	34	—	36	—	38
Tap to Tap Isolation																		
Minimum (dB)	5-10	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20
	10-750	23	—	23	—	23	—	23	—	23	—	23	—	23	—	23	—	23
	750-900	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20
	900-1002	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20	—	20
Input/Output Return Loss																		
Minimum (dB)	5-30	17	—	16	—	17	—	16	—	16	—	17	—	16	—	17	—	17
	30-600	17	—	16	—	17	—	17	—	17	—	17	—	17	—	17	—	17
	600-1002	16	—	15	—	17	—	17	—	17	—	17	—	17	—	17	—	17
Tap Port Return Loss																		
Minimum (dB)	5-10	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
	10-30	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
	30-750	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
	750-1002	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17	—	17
Hum Mod @ 12 Amps																		
Minimum (dB)	5-50	—	—	64	—	64	—	70	—	70	—	70	—	70	—	70	—	70
	50-600	—	—	70	—	70	—	70	—	70	—	70	—	70	—	70	—	70
	600-750	—	—	64	—	64	—	70	—	70	—	70	—	70	—	70	—	70
	750-1002	—	—	60	—	60	—	70	—	70	—	70	—	70	—	70	—	70

Electrical Specifications

MGT2800-SDPE Milenium Drop Power Multi-Tap

Model Tap Value	MGT (dB)	2812 12.0	2815 15.5	2818 18.0	2821 21.0	2824 24.0	2827 27.0	2830 30.0							
Frequency (MHz)															
Tap Loss Tolerance															
(dB)	5-30	1.8	2.0	1.5	1.5	1.5	1.5	1.5							
	30-900	1.8	2.0	1.5	1.5	1.5	1.5	1.5							
	900-1002	2.3	2.5	2.0	2.0	2.0	2.0	2.0							
Insertion Loss		Max	Avg	Max	Avg	Max	Avg	Max	Avg						
Maximum/ Average (dB)	5	—	—	3.7	3.6	2.1	1.7	1.3	1.0	1.2	0.9	0.8	0.7	0.8	0.7
	30-50	—	—	3.6	3.2	1.6	1.3	1.1	0.7	1.0	0.6	0.7	0.5	0.7	0.5
	100	—	—	3.7	3.4	1.6	1.4	1.1	0.7	1.0	0.7	0.8	0.6	0.8	0.6
	300	—	—	4.1	3.9	2.1	1.9	1.3	1.1	1.2	1.1	1.0	0.9	1.0	0.9
	450	—	—	4.7	4.4	2.4	2.1	1.5	1.3	1.5	1.3	1.2	1.1	1.2	1.1
	550	—	—	4.9	4.6	2.7	2.3	1.6	1.4	1.6	1.4	1.4	1.2	1.4	1.2
	750	—	—	5.2	4.6	3.3	2.9	2.1	1.9	1.8	1.6	1.7	1.5	1.7	1.5
	870	—	—	5.2	4.6	3.6	3.2	2.4	2.1	1.9	1.6	1.9	1.6	1.9	0.6
	1002	—	—	5.2	4.6	4.4	3.8	2.9	2.6	2.3	2.1	2.2	1.9	2.2	1.9
Tap to Output Isolation															
Minimum (dB)	5-30	—	20	23	24	30	34	34							
	30-750	—	25	30	31	34	36	36							
	750-900	—	24	27	29	32	34	34							
	900-1002	—	23	26	27	31	32	32							
Tap to Tap Isolation															
Minimum (dB)	5-10	20	20	20	20	20	20	20							
	10-750	23	23	23	23	23	23	23							
	750-900	20	20	20	20	20	20	20							
	900-1002	20	20	20	20	20	20	20							
Input/Output Return Loss															
Minimum (dB)	5-30	16	14	15	16	16	16	16							
	30-600	17	16	17	17	17	17	17							
	600-1002	16	15	16	16	16	16	16							
Tap Port Return Loss															
Minimum (dB)	5-30	17	17	17	17	17	17	17							
	30-600	17	17	17	17	17	17	17							
	600-750	17	17	17	17	17	17	17							
	750-1002	16	16	16	16	16	16	16							
Hum Mod @ 12 Amps															
Minimum (dB)	5-50		64	64	70	70	70	70							
	50-600		70	70	70	70	70	70							
	600-750		64	64	70	70	70	70							
	750-1002		60	60	70	70	70	70							

Specifications subject to change without notice

Specifications Milenium Drop Power Multi-Tap

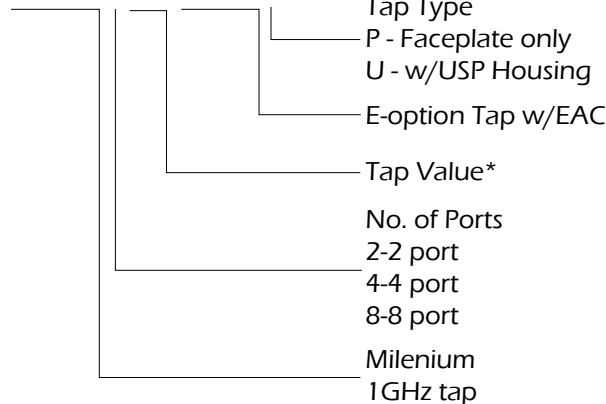
General	
Nominal Impedance	75 Ω
F-connector Type	ANSI/SCTE-01 Compliant CamPort® F-port
Surge Withstand	6 kV Combination Wave Surge per IEEE C62.41 Category B3 on all Main Line Ports** 6 kV Ring Wave Surge per IEEE C62.41 Category A3 on all Ports**
Power Rating	12 Amps Continuous (In to Out), 1.5 Amps Continuous (In to Tap)
RFI	115 dB (min)

** Passes surge with the F-ports open circuited or short circuited, Patent no.6,570,465 B2

Environmental	
Pressure Seal	15 psi
Operating Temperature	-40 °C to 60 °C
Corrosion Resistance	Meets ANSI/SCTE Specification

Ordering Information

MGT2XXX-SDPEX




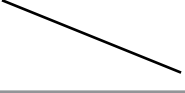

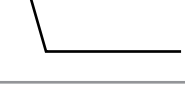

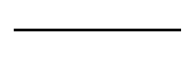
Accessory Ordering Guide

CL-JMP	Activation Jumper
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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

Ordering Matrix E-Option Plug-in Conditioner Milenium Drop Power Multi-Tap

Plug in Conditioner	(XX)	Filter Shape	Conditioner Value (-XX)
Cable Equalizer	CE		02, 04, 06, 08, 10, 12, 14 or 16 (dB) (Equalization at 860 MHz)
Cable Simulator	CS		03, 06, 09 or 12 (dB)
Return Path Attenuator	RA		02, 04, 06, 08, 10, 12, 14, 16 or 18 (dB)
High Tap Filter	HT		03, 06, 09, 12 or 15 (dB)
High Pass Filter	HP		52 or 54 (MHz)
Jumper**	JP		—

** Jumper (JP) is shipped with all E-Option taps unless requested

Related Documents

Description	Document Number
E-Option Application Note	AN-1007

XX - XX

