CATALOGO ALGUNOS ELEMENTOS EN REDES CATV Y HFC

Multitaps : Milenium Multitaps



Milenium Multitaps

Description:

The Antronix Milenium series 1 GHz multitaps are the industry's benchmark for performance, flexibility, and reliability. Designed for today's two-way active broadband networks, this flagship series is the industry's most advanced, full-feature multitap with our patented E-Option Drop Signal Conditioning. The Milenium series is available with plug-in directional coupler, twisted pair powering, F-port drop powering, and addressable tap versions. All Antronix Milenium multitaps fit into the same housing. Once installed, the multitap will not have to be respliced again, reducing cost and time during upgrades or system design changes.

Features:

- Forward/backward compatible with previous versions
- Patented E-Option Drop Signal Conditioning standard
- Patented Uninterrupted Signal and Power USP bypass switch
- Patented auto-seizing CamPort for reliable drop connection
- 12 amps current capacity
- Extended surge protection
- Rotational seizure posts for aerial and pedestal installation
- Four stage corrosion protection process
 - A 360 Aluminum alloy housing (most corrosive resistant alloy for diecasting)
 - Housing is impregnated with a sealer to prevent porosity
 - o Clear chromate coating applied inside and out
 - Double baked-on coating of polyurethane applied for superior protection
- Heat-treated stainless steel hardware with proprietary plating to reduce galvanic reaction
- Color coded multitap values for easy identification
- Integrated drip wells, numbered ports, and strip gauge
- Ribbed main line entry ports for proper adhesion of heat shrink
- Exceeds all SCTE standard
- Tap Values
 - 2 output: 04, 08, 11, 14, 17, 20, 23, 26, 29, 32 dB
 - 4 output: 08, 11, 14, 17, 20, 23, 26, 29, 32 dB
 - 8 output: 12, 15, 18, 21, 24, 27, 30, 33 dB

Benefits:

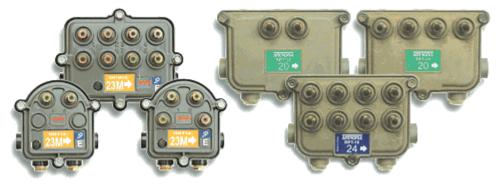
- Future-proof design all future Antronix multitaps will fit into today's housings
- E-Option Drop Signal Conditioning at the tap port

- Save time and money during installation No need to splice in new housings
- Quick, simple and inexpensive system modifications via the plug-in DC and E-option
- Increased system integrity and reliability
- E-option flexibility tools to condition the return path for reliable data communications
- Superior hum modulation performance

Features Comparison and Spec Sheets:

Model/Specs	Description	2/4/8 way tap	Plug-in DC	E-Option	Twisted Pair Powering	F-port Drop Powering	Optional 9" Dual Compartment	CamPort	More Info	
MGT3000-SE	2/4/8 way Milenium Multitap	•	•	•				•	•	-
<u>MGT2000-SE</u>	2/4/8 way Milenium Multitap	•		•				•	•	-
MGT2000-STPE	Twisted Pair Powering Tap	•		•		•		•	•	-
MGT2000-SDPE	F-Port Drop Powering Tap	•		•			٠	•	•	-
IJT-2000	Uninterruptible signal and power tool	•			•	•	•	•		-
IJT-2000F	Flexible Uninterruptible signal & power tool	•			•	•	•	•		-
9SB2	9" Dual Multitap Housing	•			•	•	•	•		-

Multitaps : Retrofit Taps



Retrofit Taps

Description:

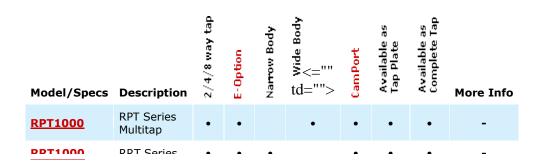
Retrofit multitap faceplates enable cable operators to upgrade their existing multitap to current digital broadband systems standards without re-splicing. E-option plug-ins are available in the RRT series, while CamPort is standard in both the RRT and RPT series. Both series are available as tap face plates or complete taps.

Features:

- Patented E-Option Drop Signal Conditioning standard
- Patented auto-seizing CamPort for reliable drop connection
- 12 amps current capacity
- Extended surge protection
- Four stage corrosion protection process
 - A 360 Aluminum alloy housing (most corrosive resistant alloy for diecasting)
 - Housing is impregnated with a sealer to prevent porosity
 - Clear chromate coating applied inside and out
 - \circ $\;$ Double baked-on coating of polyurethane applied for superior protection
- Heat-treated stainless steel hardware with proprietary plating to reduce galvanic reaction
- Color coded multitap values for easy identification
- Integrated drip wells, numbered ports, and strip gauge
- Exceeds all SCTE standard

Benefits:

- Future-proof design all future Antronix multitaps will fit into today's housings
- E-Option Drop Signal Conditioning at the tap port
- Save time and money during installation No need to splice in new housings
- Quick, simple and inexpensive system modifications via the plug-in DC and E-option
- Increased system integrity and reliability
- E-option flexibility tools to condition the return path for reliable data communications
- Superior hum modulation performance



	Multitap							
<u>RRTW1000</u>	Wide-body RRT Series Multitap	•	•	•	•	•	•	-

Multitaps : Multimedia Multitaps



Multimedia Multitaps

Description:

The Antronix Multimedia series multitaps are full-featured taps that incorporate the latest electrical and mechanical technology for optimal performance. The standard 1 GHz bandwidth ensures your system can handle present and future multimedia bandwidth requirements. Multimedia multitaps include a full line of interchangeable faceplates and multitap values, thus eliminating the need to resplice.

Features:

- Make-before-break AC/RF bypass switch
- 12 amps current capacity
- Extended surge protection
- One housing for aerial and pedestal installations
- Four stage corrosion protection process
 - A 360 Aluminum alloy housing (most corrosive resistant alloy for diecasting)
 - Housing is impregnated with a sealer to prevent porosity
 - Clear chromate coating applied inside and out
 - \circ Double baked-on coating of polyurethane applied for superior protection
- Heat-treated stainless steel hardware with proprietary plating to reduce galvanic reaction
- Color coded multitap values for easy identification
- Integrated drip wells, numbered ports, and strip gauge
- Exceeds all SCTE standards
- Tap Values
 - o 2 output: 04, 08, 11, 14, 17, 20, 23, 26, 29, 32 dB
 - 4 output: 08, 11, 14, 17, 20, 23, 26, 29, 32 dB
 - o 8 output: 12, 15, 18, 21, 24, 27, 30, 33 dB

Benefits:

- Uninterrupted signal and power during faceplate exchanges/upgrades
- Interchangeable base plates allow for quick and easy exchange of multitap values
- Excellent field reliability
- Available in narrow body housing for compact installations

• Available in wide body housing for interchangeable base plates between 2/4/8 way taps

Model/Specs	Description	2/4 way tap	2/4/8 way tap	Twisted Pair Powering	Optional 9" Auto-Seize Housing	More Info
OMT1000M-S	Multimedia Narrow Body Tap	•				-
OMTW1000M-S	Multimedia Wide Body Tap		•		•	-
OMTW1000M-SFP	F-Port Drop Powering Tap		•	•	•	-
IJT-1000	Jumper Tool	•				-
IJT-1000F	Flexible Jumper Tool	•	•			-
IJT-1000W	Wide Body Jumper Tool		•			-

Line Passives : Milenium Line Passives



Milenium Line Passives

Description:

The superior performance of the Milenium Series main line passives and equalizers are tangible evidence of our mission to become the benchmark for the broadband industry. The Milenium main line passives are capable of handling 15 amperes of continuous AC-current on all ports. Our unique circuit design and proprietary ferrite core material provide the highest level of RF performance on the market. Our low insertion loss reduces costly amplifier requirements. Power to each main line passive port can be individually controlled with a field changeable shorting bar or fuse. All ports can withstand 6kV combination wave surge protection per IEEE C62.41-1991 Cat. B3.

Features:

- 15 amps continuous AC current handling in main line passives
- 25 amps for 2 hours AC fault current handling in main line passives
- 6kV combination wave surge protection
- Direct power to each main line passive port individually with shorting bar or fuse
- Four stage corrosion protection process
 - A 360 Aluminum alloy housing (most corrosive resistant alloy for diecasting)
 - Housing is impregnated with a sealer to prevent porosity
 - Clear chromate coating applied inside and out
 - \circ $\;$ Double baked-on coating of polyurethane applied for superior protection
- Heat-treated stainless steel hardware with proprietary plating to reduce galvanic reaction
- Rotational seizure post for flexible installations
- Unique equalizer configurations for independent control of forward and reverse signals
- Exceeds all SCTE standards

Benefits:

- Optional Sidactor surge protection for 3000 amps
- Can be manufactured with the PCB in the faceplate for easy replacement or with the PCB in the housing for troubleshooting and uninterrupted service when the plate is removed

Model/Specs	Description	15A high current	6kV Surge Protection	Optional Sidactor Surge Protection	Plug-in fwd equalization and rev attenuator	Equalize 5-1000 MHz	More Info
MGDCH-2100F	Line Directional Coupler	•	•	•			-
MGLSH-xF	Line Splitter	•	•	•			-
MGPIH-2000F	Line Power Inserter	•	•	•			-
LEQ-PEA	Line EQ with plug-in fwd & rev		•		•		-
LEQ-FBW	Full bandwidth line EQ		•			•	-
LEQ	Fixed fwd line EQ		•				-

Line Passives : Multimedia Line Passives



Multimedia Line Passives

Description:

The superior performance of the Multimedia Series main line passives is tangible evidence of our mission to become the benchmark for the broadband industry. The Multimedia main line passives are capable of handling 15 amperes of continuous AC-current on all ports. Our unique circuit design and proprietary ferrite core material provide the highest level of RF performance on the market. Our low insertion loss reduces costly amplifier requirements. Power to each main line passive port can be individually controlled with a field changeable shorting bar or fuse. All ports can withstand 6kV combination wave surge protection per IEEE C62.41-1991 Cat. B3.

Features:

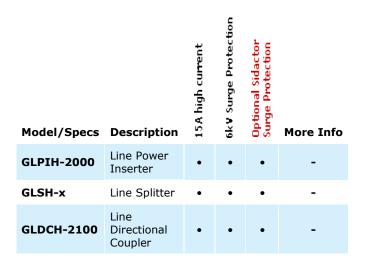
• 15 amps continuous AC current handling

- 25 amps for 2 hours AC fault current handling
- 6kV combination wave surge protection
- Direct power to each port individually with shorting bar or fuse
- Four stage corrosion protection process
 - A 360 Aluminum alloy housing (most corrosive resistant alloy for diecasting)
 - Housing is impregnated with a sealer to prevent porosity
 - Clear chromate coating applied inside and out
 - Double baked-on coating of polyurethane applied for superior protection
- Heat-treated stainless steel hardware with proprietary plating to reduce galvanic reaction
- Rotational seizure post for flexible installations
- Exceeds all SCTE standards

Benefits:

- Optional Sidactor surge protection for 3000 amps
- Can be manufactured with the PCB in the plate for easy replacement or with the PCB in the housing for troubleshooting and uninterrupted service when the plate is removed

Features Comparison and Spec Sheets:



Amplifiers : Residential Amplifiers



Residential Amplifiers

Description:

The Antronix Residential Amplifier was designed for reliable subscriber premise amplification. By using Gallium Arsenide technology, the Antronix Residential Amplifier provides improved distortion and noise performance required for today's digital applications. This is the first residential amplifier to use the patented CamPort to provide an auto-seizing F-port for maximum contact area and reliability for multimedia applications. The lightweight powder coated aluminum 360 housing provides superior corrosion resistance for year after year of quality performance.

Features:

- Patented auto-seizing CamPort for reliable drop connection
- 3 dB Noise Figure
- 6kV combination wave surge protection available on all ports
- Supports two-way digital communication
- High port-to-port isolation
- Full 5-1000 MHz bandwidth
- 15 psi sealed SCTE compliant brass CamPort
- Powder painted 360 aluminum alloy housing
- Local or remote powering
- Self-resetting short circuit protected power adaptor
- Exceeds all SCTE standards

Benefits:

- Environmentally robust with the highest level of surge protection
- Error-free installation with CamPort
- Clean amplification overcomes the poor noise figure present in TV tuners and converters
- Optional equalization available for long cable drops

Model/Specs	Description	1 output	2 outputs	4 outputs	8 outputs	6kV Ring Wave Surge Protected	6kV Combo Wave Surge Protected	Internal Cable Equalization	CamPort	More Info
ARA	Residential Amp	•	•	•	•	•	•		•	-
ARA-EQ	Residential Amp with EQ	•				•	•	•	•	-
<u>RRA</u>	Return Amp	•				•			•	-
FRA	Forward/Return Residential Drop Amplifier	•			•	•			•	-
<u>ARPI-2000</u>	Drop Power Inserter	•				•				-
MRA	Micro Drop Amp	•				•	•		•	Read More
<u>ARA4-7B1</u>	VoIP bypass amp			•		•	•		•	-

Amplifiers : Distribution Amplifier

ΔΠτ3	а ОПіХ	•		
DA55 DISTRIBUTIO	550MHz		-	
		9	0	ΔΠΤΡΟΠΙΧ
	A	A		Model: DA 870-42/54
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Distribution Amplifier

Description:

The Antronix Distribution Amplifier is ideal for multi-dwelling distribution systems where extra

signal boost is needed. Do your customers demand cable modems? No problem. Antronix's multimedia distribution amplifier has two way capabilities. For ease of setup, the unit also provides external RF test points.

Features:

- 38 dB RF gain
- Dual hybrid push-pull design for maximum gain and low distortion
- Independent forward gain and tilt controls
- Plug-in return amplifier with independent reverse gain tilt control
- Input and output surge protection
- External input and output RF test points
- Wire mesh gasket for maximum RFI suppression
- Aluminum alloy housing for efficient thermal dissipation
- 120VAC/60Hz or 90-260VAC/60Hz input powering

Benefits:

- High gain with minimum distortion
- Maximum signal flexibility
- Simple installation and system alignment

Model/Specs	Description	550 MHz BW	750 MHz BW	870 MHz BW	Plug-in return amp	Plug-in fwd and rev Eqs	Plug-in fwd and rev attenuator	90-260 VAC/60 Hz input power	110 VAC/60 Hz input power	33 dB Gain	38dB gain	More Info
DA55	550 MHz Distribution Amp	•			•				•		•	-
DA75	750 MHz Distribution Amp		•		•				•		•	-
DA750-42/54	750 MHz Distribution Amp		•		•	•	•	•		•		-
DA870-42/54	870 MHz Distribution Amp			•	•	•	•	•		•		-

Drop Passives : Digital Drop Splitters



Digital Drop Splitters

Description:

The CMC series digital splitter by Antronix are premium grade passives designed specifically for two-way multimedia applications. Our low intermodulation design and optimized return band prevents high cable modem signals from affecting forward band transmission. Therefore, the CMC series digital splitter is ideal for present and future multimedia applications including video, telephony, and transmission sensitive digital signals such as QPSK and QAM data.

Features:

- 6kV ring wave surge protection on all ports
- 40 dB port-to-port isolation in return band
- 35 dB output return loss in return band
- Low intermodulation design
- Nickel alloy plating for the highest level of corrosion resistance
- Zinc alloy diecast housing and backplate for superior housing integrity
- Industry leading insertion loss
- 15 psi sealed SCTE compliant F-ports
- 100% soldered backplate
- Machine threaded F-ports
- Available with SCTE Compliant CamPort or Eclipse Contact Technology F-Port

Benefits:

- Ideal for digital and cable modem applications
- High surge resistance to withstand harsh environments
- Unique plating for unmatched corrosion resistance
- Comprehensive line of digital splitters: 2, 3, 4, 6, 8, 16-way splitters, horizontal, vertical, power passing, digital interface splitter.



	D · · · · ·									
<u>CMC3000H</u>	Digital Splitter with CamPort	•				•			-	
<u>CMC3000V</u>	Digital Splitter with CamPort		•			•			-	
<u>СМС2000Н</u>	Digital Splitter with ECT Port	•					•		-	
<u>CMC2000V</u>	Digital Splitter with ECT Port		•				•		-	
СМСРЗОООН	Power Pass Digital Splitter	•				•			-	
CMCDS2208H	Digital Interface Splitter	•					•	•	-	
<u>CMC2003BH</u>	3-way balanced drop splitter	•					•		-	
<u>CMC2000U</u>	CMC2000U- series Universal Mount splitter.				•		•		-	
<u>CMC2000F</u>	CMC2000F series flat top digital splitter			•			•		-	

Drop Passives : Digital Directional Couplers



Digital Directional Couplers

Description:

The CMCDT series digital directional couplers by Antronix are designed specifically for twoway multimedia applications. Our low intermodulation design and optimized return band prevents high cable modem signals from affecting forward band transmission. Therefore, the CMCDT series digital directional coupler is ideal for present and future multimedia applications including video, telephony, and transmission sensitive digital signals such as QPSK and QAM data.

Features:

- 6kV ring wave surge protection on all ports
- High port-to-port isolation in return band
- Excellent output return loss in return band
- Low intermodulation design
- Nickel alloy plating for the highest level of corrosion resistance
- Zinc alloy diecast housing and backplate for superior housing integrity
- Industry leading insertion loss
- 15 psi sealed SCTE compliant F-ports
- 100% soldered backplate
- Machine threaded F-ports
- Available with SCTE Compliant CamPort or Eclipse Contact Technology F-Port

Benefits:

- Ideal for digital and cable modem applications
- High surge resistance to withstand harsh environments
- Unique plating for unmatched corrosion resistance
- Comprehensive line of digital directional couplers: L and T-style housings

Features Comparison and Spec Sheets:

Model/Specs	Description	T-style housing	L-style housing	CamPort	Eclipse Contact Technology	More Info
CMCDT3100T	Digital DC with CamPort	•		•		-
CMCDT3100L	Digital DC with CamPort		•	•		-
CMCDT2100T	Digital DC with ECT port	•			•	-
CMCDT2100L	Digital DC with ECT port		•		•	-

Drop Passives : Digital Multitaps



Digital Multitaps

Description:

The Antronix digital taps are designed for two-way drop networks. Available with two, four, or eight outputs, our digital taps are perfect for everyday low-level signal installation and high-level signal applications like cable modems.

Features:

- 2, 4, or 8 outputs with a variety of multitap values
- 6kV ring wave surge protection on all ports
- Low intermodulation design
- Zinc alloy diecast housing with nickel alloy plating
- Diectional coupler and splitter integrated into the same housing
- 15 psi sealed SCTE compliant F-ports
- 100% soldered backplate
- Machine threaded F-ports
- Available with SCTE Compliant CamPort or Eclipse Contact Technology F-Port

Benefits:

- Ideal for digital and cable modem applications
- High surge resistance to withstand harsh environments
- Unique plating for unmatched corrosion resistance
- Comprehensive line of digital taps: Horizontal and vertical port configurations
- Tap Values
 - o 2 output: 04, 08, 11, 14, 17, 20, 23, 26, 29, 32 dB
 - $\circ \quad$ 4 output: 08, 11, 14, 17, 20, 23, 26, 29, 32 dB
 - o 8 output: 12, 15, 18, 21, 24, 27, 30, 33 dB

Model/Specs	Description	2/4/8 way tap	Horizontal Housing	Vertical Housing	CamPort	Eclipse Contact Technology	More Info
CMCDT3000H	Digital Directional Tap with CamPort	•	•		•		-
CMCDT3000V	Digital Directional Tap with CamPort	•		•	•		-
CMCDT2000H	Digital multitap with ECT Port	•	•			•	-
CMCDT2000V	Digital multitap with ECT Port	•		•		•	-

Fiber Optics : Fiber Nodes



Fiber Nodes

Description:

Antronix Fiber Node (AFN) The AFN is a technologically advanced, high quality, cost-effective bi-directional fiber node. The unit is available in 2 versions: The "H" version has constant RF output over the entire optical input window, while the "L" version's RF output varies with optical input. The AFN meets full

specifications with optical input levels ranging from -8 dBm to + 2 dBm. The receive RF path includes provisions for Antronix's E-Option® plug-ins for sloped RF output as well as user adjustable padding for optimal forward path setup. An optional return path optical transmitter is available in 2 versions: Fabry-Perot (FP) and Distributed Feedback (DFB).

Application:

The AFN allows the service provider to cost-effectively improve network performance by bringing fiber closer to the end user. Its small size enables placement in most NID boxes, while the robust housing can be used in both indoor and outdoor installations. Markets include MDU, hotels/motels, education, government, business, institutions, etc. Target customers are MSOs and small/medium sized cable operators and telephone companies.

Features:

- +38 dBmV constant RF output for a -8 to +2 dBm optical input
- Full 1 GHz bandwidth
- FP, DFB or CWDM DFB return transmitter options
- Patented CamPort® F-connectors
- Small, compact housing
- E-Option® plug-in for signal conditioning 54-1000 MHz
- 1 V/mW external optical power test point
- Low power consumption

Benefits:

- Cost effective, reliable service transmission of telephony, video and high speed data
- Ideally suited for small business, MDU and educational applications
- Field accessible controls to ease device setup
- Small, compact housing
- Decreased operational costs

Model/Specs	Descriptio n	+2 to -8 dBm Optical Input	+38 dBmV RF Output	+28 dBmV RF Output	CamPort	FP Return Transmitter	DFB Return Transmitter	CWDM Return Transmitter	Forward Signal Conditioning	Return Path Attenuator	LED optical Power Indicators	Optical Power DC Test Point	More Info	
AFN-HSA-xxxx- xxx	Antronix Fiber Node:	•	•		•	•	•	•	•	•	•	•	-	
AFN-LSA-xxxx	Antronix Fiber Node:	•		•	•	•	•	•		•	٠	•	-	

Attenuators & Connectors : In-Line Attenuators



In-Line Attenuators

Description:

Antronix offers the GAF series in-line attenuators for excellent RF characteristics. The 22 gauge center pin and solid screw machine brass housing with nickel plating provides a robust mechanical package.

Features:

- Attenuation values: 3, 6, 10, 12, 16, 20 dB values
- Excellent return loss
- Available with CamPort
- Accepts RG-59 and RG-6 cables

Benefits:

- Quick reliable padding for all CATV applications
- Consistent dB values

Model/Specs	Description	CamPort	More Info
<u>GAF3000</u>	In-line attenuator with CamPort	•	-
<u>GAF2000</u>	In-line attenuator		-

Attenuators & Connectors : F81-splice



F81-splice

Description:

Our brass F81 provides a reliable cable splice designed for the stringent requirements of digital communications.

Features:

- Brass F-port
- Flat F-ports for maximum connector surface contact
- Available with CamPort for intermittent-free contact

Benefits:

• Exceptional RF characteristics for digital applications

Features Comparison and Spec Sheets:

Model/Specs	Description	Brass Ports	Flat F-port	CamPort	Eclipse Contact Technology	2 GHz Bandwidth	More Info
<u>F81BCP</u>	Brass F- Splice with CamPort	•	•	•			-
<u>F81B</u>	Brass F- Splice, hi performance	•	•		•	•	-
F81	F-Splice						-

Attenuators & Connectors : Ground Block



Ground Block

Description:

Antronix's high performance ground blocks are perfect for today's demanding grounding applications. Our corrosion resistant nickel plating and brass F-port ensures a reliable mechanical connection. The ground block is also available with our unique auto-seizing CamPort for the most reliable cable connection available today.

Features:

- Nickel plated body for superior corrosion resistance Brass F-port
- Excellent return loss
- Flat F-ports for maximum connector surface contact
- Available with CamPort for intermittent-free contact

Benefits:

- Exceptional RF characteristics for digital applications
- Reliable, corrosion resistant grounding

Model/Specs	Description	Brass Ports	Flat F-port	CamPort	Eclipse Contact Technology	2 GHz Bandwidth	More Info
<u>А7ВСР</u>	Ground Block with brass CamPort	•	•	•			-
<u>A7B</u>	Ground Block with brass F81	•	•		•	•	-
A7	Ground Block						-
DG2	Dual Ground Block						-