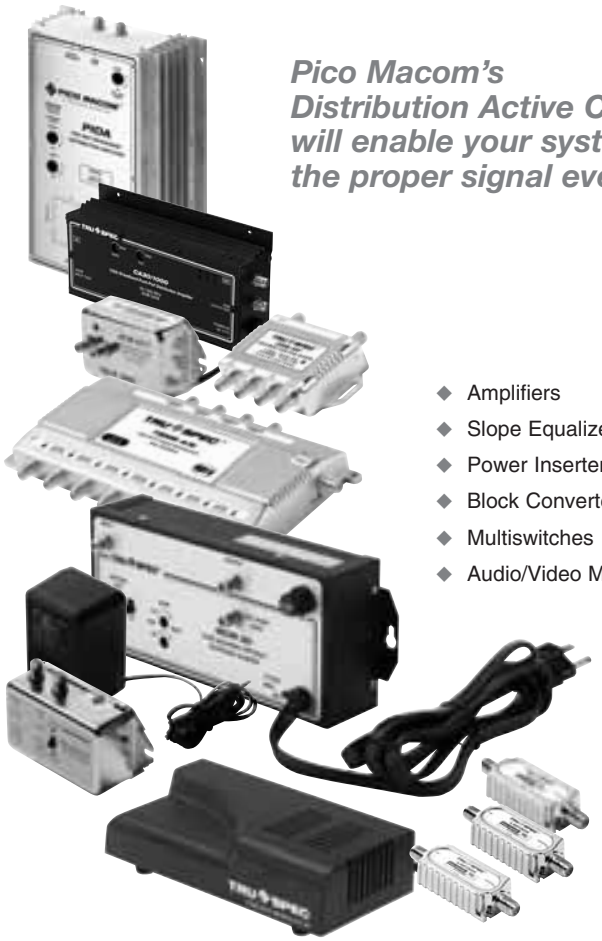
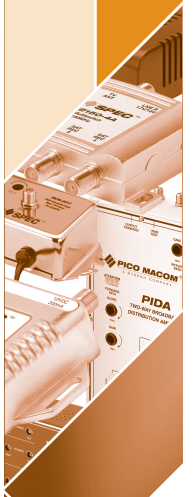


Pico Macom's Distribution Active Components will enable your system to deliver the proper signal every time!

- Amplifiers
- Slope Equalizers
- Power Inserters
- Block Converters
- Multiswitches
- Audio/Video Modulators

Section B Index

Distribution Active Components



PICO MACOM®
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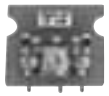
PIDA-1000

Broadband Bi-Directional Push-Pull Distribution Amplifier

Available in the following Attenuator (AT) and Equalizer (EQ) Values (dB):



PIDA-AT9

PIDA-AT6	**PIDA-EQ6**
PIDA-AT9	**PIDA-EQ9**
PIDA-AT12	**PIDA-EQ12**
PIDA-AT18	**PIDA-EQ18**

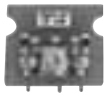
- 54~1000 MHz (CATV 2~158) and 5~36 MHz reverse bandwidth (CATV T7~T11)
- 30 dB forward path gain and 20 dB or passive reverse path gain (switchable) for maximum flexibility
- ±0.75 dB flatness across band provides low distortion and excellent frequency response
- Employs dual state-of-the art push-pull hybrid technology for very low distortion, high input and output capability
- Optional plug-in equalizers and attenuators enable unity gain and slope system balancing for minimum distortion
- -30 dB input and output test points enable simplified setup and performance monitoring without service interruption
- Built-in lightning and line-voltage surge protection protects the unit from damage
- External UL approved power supply

Bandwidth	5~1000 MHz
Gain (FWD) 54~1000 MHz	30 dB
Gain (REV) 5~36 MHz	20 dB
Max. Output (158 ch.)	38 dBmV
Flatness	0.5 dB
Noise Figure (FWD)	5 dB
Noise Figure (REV)	4 dB
Composite Second Order (FWD)	60 dB
Composite Triple Beat (FWD)	58 dB
Input Test Point Loss	30 dB
Output Test Point Loss	30 dB
Power Input	26 VDC
Power Required	26 Watt
Dimensions	11″(L) x 3.25″(D) x 7″(W)
Weight	6.2 lbs

PIDA-550

Broadband Bi-Directional Push-Pull Distribution Amplifier

Available in the following Attenuator (AT) and Equalizer (EQ) Values (dB):



PIDA-AT9

PIDA-AT6	**PIDA-EQ6**
PIDA-AT9	**PIDA-EQ9**
PIDA-AT12	**PIDA-EQ12**
PIDA-AT18	**PIDA-EQ18**

- 54-550 MHz (CATV 2~PPP) and 5~36 MHz reverse bandwidth (CATV T7~T11)
- 30 dB forward path gain and 20 dB or passive reverse path gain (switchable) for maximum flexibility
- ±0.75 dB flatness across band provides low distortion and excellent frequency response
- Employs dual state-of-the art push-pull hybrid technology for very low distortion, high input and output capability
- Optional plug-in equalizers and attenuators enable unity gain and slope system balancing for minimum distortion
- -30 dB input and output test points enable simplified setup and performance monitoring without service interruption
- Built-in lightning and line-voltage surge protection protects the unit from damage
- External UL approved power supply

Bandwidth	5~550 MHz
Gain (FWD) 54~550 MHz	30 dB
Gain (REV) 5~36 MHz	20 dB
Max. Output (82 ch.)	45 dBmV
Flatness	0.5 dB
Noise Figure (FWD)	5 dB
Noise Figure (REV)	4 dB
Composite Second Order (FWD)	60 dB
Composite Triple Beat (FWD)	58 dB
Input Test Point Loss	30 dB
Output Test Point Loss	30 dB
Power Input	26 VDC
Power Required	26 Watt
Dimensions	11″(L) x 3.25″(D) x 7″(W)
Weight	6.2 lbs

CA-30/1000

1 GHz Broadband Push-Pull Distribution Amplifier

- 54~1000 MHz frequency range (CATV 2~158)
- 30 dB gain for optimal carrier to noise ratio and superior picture quality
- ±0.5 dB flatness across band provides low distortion and excellent frequency response
- Employs state-of-the art hybrid push-pull technology for distortion-free audio-video quality
- Adjustable slope and gain controls for easy system balancing
- Easy-access controls and low-loss (-20 dB) test point enable simplified setup and performance monitoring
- Shielded enclosure provides over 95 dB RFI shielding performance reducing leakage and ingress
- Built-in lightning and line voltage surge protection protects the unit from damage

Bandwidth	54~1000 MHz
Gain (FWD) 54~1000 MHz	30 dB
Maximum Output (158 channels)	38 dBmV
Flatness	0.5 dB
Noise Figure (FWD)	5 dB
Composite Second Order (FWD)	60 dB
Composite Triple Beat (FWD)	58 dB
Input Test Point Loss	20 dB
Output Test Point Loss	20 dB
Power Input	115 VAC
Power Frequency	60 Hz
Power Required	4 Watt
Dimensions	8″(L) x 2.75″(D) x 4.5″(H)
Weight	2.5 lbs.

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CA-50/550

550 MHz High-Gain Distribution Amplifier

- 54-550 MHz frequency range (CATV 2~PPP)
- 50 dB gain designed for low input applications to provide optimum carrier to noise performance
- ±0.75 dB flatness per 100 MHz provides low distortion and excellent frequency response
- Employs state-of-the-art hybrid push-pull technology for distortion-free audio-video quality
- Adjustable slope and gain controls for easy system balancing
- Easy-access controls and low-loss (-20 dB) test point enable simplified setup and performance monitoring
- Built-in lightning and line voltage surge protection protects the unit from damage

Bandwidth	54~550 MHz
Gain (FWD) 54~550 MHz	50 dB
Maximum Output (82 channels)	53 dBmV
Flatness	0.5 dB
Noise Figure (FWD)	6 dB
Composite Second Order (FWD)	60 dB
Composite Triple Beat (FWD)	58 dB
Input Test Point Loss	20 dB
Output Test Point Loss	20 dB
Power Input	115 VAC
Power Frequency	60 Hz
Power Required	4 Watt
Dimensions	8″(L) x 2.75″(D) x 4.5″(H)
Weight	2.5 lbs

CA-30/550

550 MHz Push-Pull Distribution Amplifier

- 54-550 MHz frequency range (CATV 2~PPP)
- 30 dB gain for optimal carrier to noise ratio and superior picture quality
- ±0.5 dB flatness across band provides low distortion and excellent frequency response
- Employs state-of-the art hybrid push-pull technology for distortion-free audio-video quality
- Adjustable slope and gain controls for easy system balancing
- Easy-access controls and low-loss (-20 dB) test point enable simplified setup and performance monitoring
- Built-in lightning and line voltage surge protection protects the unit from damage

Bandwidth	54~550 MHz
Gain (FWD) 54~550 MHz	30 dB
Maximum Output (82 channels)	53 dBmV
Flatness	0.5 dB
Noise Figure (FWD)	4.5 dB
Composite Second Order (FWD)	70 dB
Composite Triple Beat (FWD)	61 dB
Input Test Point Loss	20 dB
Output Test Point Loss	20 dB
Power Input	115 VAC
Power Frequency	60 Hz
Power Required	4 Watt
Dimensions	8″(L) x 2.75″(D) x 4.5″(H)
Weight	2.3 lbs

MCM-55

300 MHz VHF High-Gain Push-Pull Amplifier

- 54-300 MHz frequency range (CATV 2~W)
- High 55 dB gain for optimal carrier to noise ratio and superior picture quality
- ±0.5 dB flatness across band provides low distortion and excellent frequency response
- Employs state-of-the art hybrid push-pull technology for distortion-free audio-video quality
- Adjustable slope and gain controls for easy system balancing
- Easy-access controls and low-loss (-30 dB) test point enable simplified setup and performance monitoring
- Built-in lightning and line voltage surge protection protects the unit from damage
- External UL approved power adapter supplied for ease of installation and to reduce heat build-up within the unit

Bandwidth	54~300 MHz
Gain (FWD) 54~300 MHz	55 dB
Maximum Output (36 channels)	51 dBmV
Flatness	0.5 dB
Noise Figure (FWD)	5 dB
Composite Second Order (FWD)	70 dB
Composite Triple Beat (FWD)	61 dB
Input Test Point Loss	30 dB
Output Test Point Loss	30 dB
Power Input	28 VAC
Power Frequency	60 Hz
Power Required	17 Watt
Dimensions	8″(L) x 4.5″(D) x 2″(H)
Weight	2.8 lbs

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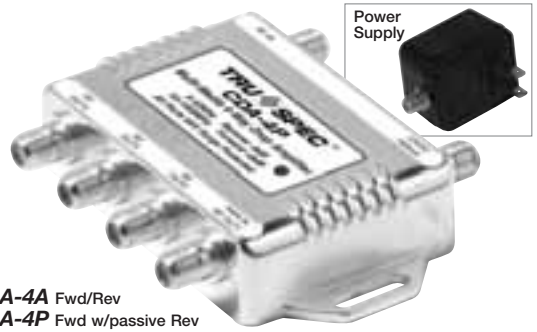
CDA-4 Series

1 GHz CATV Drop Bi-Directional Amplifiers



CDA-4A Fwd/Rev
CDA-4P Fwd w/passive Rev

- Forward bandwidth 54 to 1000 MHz allows use in large broadband systems. Reverse bandwidth 5 to 42 MHz allows interactive revenue generating services
- 8 dB forward gain provides better carrier to noise separation for optimum system performance.
- 4 outputs simplify installation and reduce equipment clutter caused by external signal splitting
- Ultra low 3 dB noise figure provides clean distribution, reducing digital artifacts in digital signals, and provides clearer analog pictures
- 6 kV surge protected on all ports to protect consumer equipment from transient voltages and line surges
- Output or independent power ″F″ port capability provides powerful flexibility option for local or remote powering
- External UL approved power supply for international or North American use

Bandwidth	5~1000 MHz
Gain (FWD) 54~1000 MHz	8 dB
Gain (REV) 5~42 MHz	4 dB (4A) -7.5 dB (4P)
Maximum Output (158 channels)	11 dBmV
Flatness	0.75 dB
Noise Figure (FWD)	3 dB
Composite Second Order (FWD)	62 dB
Composite Triple Beat (FWD)	74 dB
Power Input	12 VDC
Power Required	2.5 Watt
Dimensions	3.4″(L) x 2.4″(D) x 0.9″(H)
Weight	0.8 lbs

CDA-2 Series

1 GHz CATV Drop Bi-Directional Amplifiers

CDA-2A Fwd/Rev
CDA-2P Fwd w/passive Rev

- Forward bandwidth 54 to 1000 MHz allows use in large broadband systems. Reverse bandwidth 5 to 42 MHz allows interactive revenue generating services
- 11 dB forward gain provides better carrier to noise separation for optimum system performance.
- 2 outputs simplify installation and reduce equipment clutter caused by external signal splitting
- Ultra low 3 dB noise figure provides clean distribution, reducing digital artifacts in digital signals, and provides clearer analog pictures
- 6 kV surge protected on all ports to protect consumer equipment from transient voltages and line surges
- Output or independent power ″F″ port capability provides powerful flexibility option for local or remote powering
- External UL approved power supply for international or North American use

Bandwidth	5~1000 MHz
Gain (FWD) 54~1000 MHz	11 dB
Gain (REV) 5~42 MHz	7 dB (2A) -4.5 dB (2P)
Maximum Output (158 channels)	15 dBmV
Flatness	0.75 dB
Noise Figure (FWD)	3 dB
Composite Second Order (FWD)	62 dB
Composite Triple Beat (FWD)	74 dB
Power Input	12 VDC
Power Required	2.5 Watt
Dimensions	3.4″(L) x 2.4″(D) x 0.9″(H)
Weight	0.8 lbs

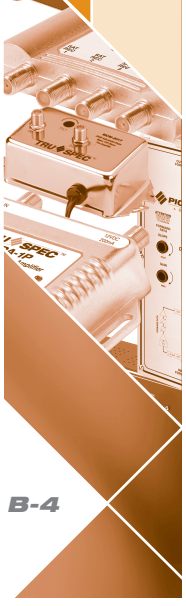
CDA-1 Series

1 GHz CATV Drop Bi-Directional Amplifiers

CDA-1A Fwd/Rev
CDA-1P Fwd w/passive Rev

- Forward bandwidth 54 to 1000 MHz allows use in large broadband systems. Reverse bandwidth 5 to 42 MHz allows interactive revenue generating services
- 15 dB forward gain provides better carrier to noise separation for optimum system performance.
- 1 output simplifies installation and reduce equipment clutter caused by external signal splitting
- Ultra low 3 dB noise figure provides clean distribution, reducing digital artifacts in digital signals, and provides clearer analog pictures
- 6 kV surge protected on all ports to protect consumer equipment from transient voltages and line surges
- Output or independent power ″F″ port capability provides powerful flexibility option for local or remote powering
- External UL approved power supply for international or North American use

Bandwidth	5~1000 MHz
Gain (FWD) 54~1000 MHz	15 dB
Gain (REV) 5~42 MHz	10 dB (1A) -1 dB (1P)
Maximum Output (158 channels)	19 dBmV
Flatness	0.75 dB
Noise Figure (FWD)	3 dB
Composite Second Order (FWD)	62 dB
Composite Triple Beat (FWD)	74 dB
Power Input	12 VDC
Power Required	2.5 Watt
Dimensions	3.4″(L) x 2.4″(D) x 0.9″(H)
Weight	0.8 lbs



PICO MACOM®
A STEREN COMPANY

TA-52

806 MHz UHF/VHF/FM High-Gain Launch Amplifier

- 54~806 MHz frequency range (TV 2~69)
- 52 dB high gain typical, provides excellent carrier to noise performance for superior picture quality
- 3 independently adjustable band, gain, and slope controls (VHF-low, VHF-high, UHF) for optimal carrier to noise ratio and easy system balancing
- Dual switchable input attenuators eliminate overloading and reduce harmonic distortion preserving picture quality
- Convenient front access switchable FM trap filter eliminates high level local FM radio stations reducing harmonic distortion
- -20 dB output test point enables simplified setup and performance monitoring without service interruption
- Combined or separate VHF/UHF inputs provide application flexibility
- Internal power supply employs voltage surge protection circuitry for increased life

Bandwidth	54~806 MHz
Gain (FWD) 54~806 MHz	48 dB
Maximum Output (3 channels)	60 dBmV
Noise Figure (FWD)	5 dB (VHF) 7 dB (UHF)
Output Test Point Loss	20 dB
Power Input	117 VAC
Power Frequency	60 Hz
Power Required	40 Watt
Dimensions	19″(L) x 3″(D) x 5″(H)
Weight	6.6 lbs

TA-36

31-36 dB Adjustable Sloped UHF/VHF/FM Distribution Amplifier

- Cost-Effective Wide-Frequency Bandwidth Amplifier
- 68 Off-Air Channel Range (54~806 MHz) suitable for small to large MATV-SMATV systems
- 5 dB sloped-output across band provides low harmonic distortion
- 15 dB Independently adjustable band-gain controls for optimal carrier to noise ratio and balancing
- Dual -20 dB FM trap switches (88~96 MHz, 95~108 MHz) effectively filter high level local FM radio stations reducing harmonic distortion
- Heavy Gauge Rugged Shielded Wall-Mount Case
- Convenient and compact design allows quick and easy installation
- Front Panel LED Power Indicator and Fuse Holder

Bandwidth	54~806 MHz
Gain 54~806 MHz	31~36 dB (sloped)
Maximum Output (15 channels)	41 dBmV
Flatness	5 dB
Noise Figure	5 dB (VHF) 7 dB (UHF)
Output Test Point Loss	20 dB
Power Input	117 VAC
Power Frequency	60 Hz
Power Required	7 Watt
Weight	2.2 lbs

TA-25

18-25 dB Sloped UHF/VHF/FM Distribution Amplifier

- Cost-effective Wide-Frequency Bandwidth Amplifier
- 68 Off-Air Channel Range (54~806 MHz) suitable for small to large MATV-SMATV systems
- 7 dB sloped-output across band provides low harmonic distortion
- -20 dB FM trap switch (88~108 MHz) filters high level local FM radio stations reducing harmonic distortion
- Heavy Gauge Rugged Shielded Wall-Mount Case
- Convenient and compact design allows quick and easy installation
- Front Panel LED Power Indicator

Bandwidth	54~806 MHz
Gain 54~806 MHz	18~25 dB (sloped)
Maximum Output (15 channels)	32 dBmV
Flatness	7 dB
Noise Figure	5 dB (VHF) 7 dB (UHF)
Power Input	117 VAC
Power Frequency	60 Hz
Power Required	4.4 Watt
Weight	1.2 lbs

PICO MACOM®
A STEREN COMPANY

TA-15

11-15 dB Sloped UHF/VHF/FM Distribution Amplifier

- Cost-Effective Wide-Frequency Bandwidth Amplifier
- 68 Off-Air Channel Range (54~806 MHz) suitable for small to large MATV-SMATV systems
- 4 dB sloped-output across band provides low harmonic distortion
- Heavy Gauge Rugged Shielded Case
- Convenient and compact design allows quick and easy installation

Bandwidth	54~806 MHz
Gain 54~806 MHz	11~15 dB (sloped)
Maximum Output (15 channels)	34 dBmV
Flatness	4 dB
Noise Figure	6 dB (VHF) 7 dB (UHF)
Power Input	117 VAC
Power Frequency	60 Hz
Power Required	2 Watt
Weight	1 lb

TA-12

12 dB 2-Output UHF/VHF/FM Distribution Amplifier

- Cost-Effective Wide Frequency Bandwidth Amplifier
- 68 Off-Air Channel Range (54~806 MHz) suitable for small to large MATV-SMATV systems
- Very Low-Noise and Distortion
- 2 Full-Level Outputs reduces need for additional splitters for simple distribution design
- Heavy Gauge Rugged Shielded Wall-Mount Case
- Convenient and compact design allows quick and easy installation
- Front Panel LED Power Indicator

Bandwidth	54~806 MHz
Gain 54~806 MHz	12 dB
Maximum Output (15 channels)	41 dBmV
Flatness	1 dB
Noise Figure	6 dB (VHF) 7 dB (UHF)
Power Input	117 VAC
Power Frequency	60 Hz
Power Required	2 Watt
Weight	1.2 lbs

MPA-HD

Mast-Mounted HDTV Pre-Amplifier

- Digital Signal Optimized Mast-Mounted Pre-Amplifier
- 68 Off-Air Channel Range (54~806 MHz) suitable for small to large MATV-SMATV systems
- 2 dB sloped-output across band provides low harmonic distortion
- Incorporated 75-Ohm F-type input and output interface, providing optimum connection
- 6 kV Lighting Surge Protected
- Weather-Protected Connections
- Maximum Input 30 dBmV/VHF, 25 dBmV/UHF
- Mounting Hardware Included
- External 117VAC 60Hz 5W Power Source
- UL Approved

Bandwidth	54~806 MHz
Gain 54~806 MHz	15~17 dB (sloped)
Maximum Output (15 channels)	32 dBmV
Flatness	0.5 dB (sloped 2 dB)
Noise Figure	3 dB (VHF) 5 dB (UHF)
Power Input	117 VAC
Power Frequency	60 Hz
Power Required	5 Watt
Weight	2.2 lbs

PICO MACOM®
A STEREN COMPANY

MCM-30

30 dB Adjustable VHF-Band Distribution Amplifier

- Cost-Effective VHF Amplifier
- 13 Off-Air Channel Range (54~216 MHz) suitable for small to large MATV-SMATV systems
- Very Low-Noise and Distortion
- 15 dB range independently adjustable VHF High-Low Band-gain controls for optimal carrier to noise ratio and balancing
- Dual –20 dB FM trap switches (88~96 MHz, 95~108 MHz) effectively filter high level local FM radio stations reducing harmonic distortion
- Heavy Gauge Rugged Shielded Wall-Mount Case
- Convenient and compact design allows quick and easy installation
- Front Panel LED
- Power Indicator and Fuse Holder

Bandwidth	54~216 MHz
Gain 54~216 MHz	30~35 dB (sloped)
Maximum Output (12 channels)	43 dBmV
Flatness	0.5 dB
Noise Figure	5 dB

Power Input	117 VAC
Power Frequency	60 Hz
Power Required	5 Watt
Weight	2.1 lbs

MCM-201T

20 dB Adjustable-Slope Basic VHF-Band Pre-Amplifier

- Cost-effective basic VHF pre-amplifier designed for indoor amplification of VHF antenna signals prior to signal separation and balancing
- 66 CATV Channel Range (54~450 MHz) suitable for home signal distribution
- 10 dB Adjustable Tilt-Level Control
- Heavy Gauge Rugged Shielded Wall-Mount Case
- Convenient and compact design allows quick and easy installation
- Maximum Input 20 dBmV (7 channels), 11 dBmV (36 channels)

Bandwidth	54~450 MHz
Gain 54~300 MHz	20 dB
Maximum Output (12 channels)	31 dBmV
Flatness	1 dB
Noise Figure	4 dB

Power Input	117 VAC
Power Frequency	60 Hz
Power Required	2.5 Watt
Weight	2.1 lbs

MCM-101

10 dB Basic VHF-Band Amplifier

- Cost-Effective Basic VHF Amplifier
- 66 CATV Channel Range (54~450 MHz) suitable for home signal distribution
- Heavy Gauge Rugged Shielded Wall-Mount Case
- Convenient and compact design allows quick and easy installation
- Maximum Input 36 dBmV (7 non-adjust channels), 24 dBmV (36 non-adjust channels)

Bandwidth	54~450 MHz
Gain 54~300 MHz	10 dB
Maximum Output (12 channels)	34 dBmV
Flatness	1 dB
Noise Figure	4 dB

Power Input	117 VAC
Power Frequency	60 Hz
Power Required	2 Watt
Weight	2.1 lbs

PICO MACOM®
A STEREN COMPANY

XSV

Sub Band to VHF Band Block Converter

- 7 Channel Input Range 5~49 MHz (CATV Sub Band)
- 7 Channel Output Range 174~216 MHz (TV VHF 7~13)
- Low insertion loss improves carrier to noise performance
- Full Band conversion allows monitoring and testing of data carriers
- PLL-design guarantees precise frequency locking for solid drift-free operation
- External UL approved power adapter supplied for ease of installation and to reduce heat build-up within the unit

Input Bandwidth	5~49 MHz
Input Level (max)	5~30 dBmV
Input Connection	75 Ohm F-female
Output Bandwidth	174~216 MHz
Insertion Loss	4 dB
Frequency Accuracy	±5 kHz
Carrier to Noise (out-band)	57 dB
Output Connection	75 Ohm F-female
Voltage Input	18 VDC
Voltage Frequency	0 Hz
Power Required	100 mA
Dimensions	6.8″(L) x 2.99″(D) x 1.65″(H)
Weight	0.8 lbs.

LA-2150 Series

Satellite IF Inline Amplifiers

- High-Grade Satellite IF Inline Amplifiers suitable for DBS or MMDS Satellite applications
- Available in 950~2150 MHz for Satellite only applications, or 40~2150 MHz for Satellite and Terrestrial applications
- 16~20 dB sloped versions compensate for loss on long cable runs
- DC Pass-Thru Current 500 mA maximum for LNB Powering
- Output Level 105 dBµV Maximum
- High Performance SMD Board Circuitry
- Precision Machined F connector Threads
- Soldered back-cover plate ensures high isolation >120 dB
- Nickel Plated Zinc-Alloy Die-Cast Housing

Bandwidth	
40~2150 MHz (LA-2150A/B)	
950~2150 MHz (LA-2150C/D)	
Gain 40~2150 MHz	
20 dB (LA-2150A)	
16~20 dB sloped (LA-2150B)	
Gain 950~2150 MHz	
20 dB (LA-2150C)	
16~20 dB sloped (LA-2150D)	
Noise Figure	5 dB
Power Input	12~18 VDC
Power Required	0.7 Watt
Weight	0.25 lbs

Ordering Information

LA-2150A	20 dB 40-2150 MHz
LA-2150B	16-20 dB Sloped 40-2150 MHz
LA-2150C	20 dB 950-2150 MHz
LA-2150D	16-20 dB Sloped 950-2150 MHz

LA-10

11 dB 5~950 MHz Inline MATV Amplifier

- MATV Inline Amplifier suitable for MATV Applications
- Used with PS10 Power Inserter-Diplexer
- 120VAC 60Hz 7.5W
- DC-Line Powered Requirements 10 VDC 45 mA
- DC Pass-Thru Current 500mA maximum for powering down converters and other amplifiers
- Maximum Input 28 dBmV (7 Channels)
- Precision Machined F-Connector Threads
- Nickel Plated Metal Outdoor Housing

Bandwidth	5~950 MHz
Gain 5~950	11 dB
Maximum Output (125 channels)	18 dBmV
Flatness	2 dB
Noise Figure	4 dB
Power Input	10 VDC
Power Required	0.45 Watt
Weight	0.25 lbs

PICO MACOM®
A STEREN COMPANY

PS Series

Power Inserter-Diplexers

- Wideband frequency response allows use in broadband two-way systems
- Power injector suitable for supplying power upstream to amplifiers and block downconverters
- Hard-wired transformer to injector interface eliminates accidental power interruptions
- Directional power insertion protects downstream components from unwanted voltage damage
- RF choke circuitry in power injector eliminates signals radiating from transformer
- Precision Machined F-Connector Threads provide solid connection interface

Bandwidth	5~950 MHz
Insertion Loss	1 dB
Input Connector	75 Ohm F-female
Output Connector	75 Ohm F-male
Input Voltage	115 VAC

Ordering Information

PS-10	10 VDC @ 100 mA
PS-12	12 VDC @ 350 mA
PS-20-350	20 VDC @ 350 mA
PS-20-850	20 VDC @ 850 mA

Custom Power Supply

- Wideband or Narrowband frequency response allows use in broad or specific applications
- Separate power injector available for supplying power to equipment in the upstream or downstream configuration
- Optional hard-wired transformer to injector or transformers with F-type interface provides user flexibility
- Directional power insertion protects downstream components from unwanted voltage damage
- RF choke circuitry in power injector eliminates signals radiating from transformer
- Precision Machined F-Connector Threads provide solid connection interface

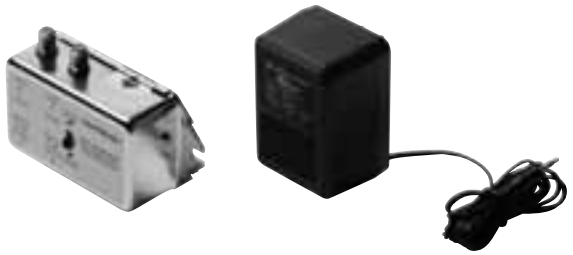
Bandwidth	5~2300 MHz
Insertion Loss	< -2 dB
Input Connector	F/BNC/RCA/Other
Input Voltage	115/240 VAC 50/60 Hz
Output Voltage	5~60 VAC

Ordering Information

Call for Custom Power Supply Quote
(minimum order quantities may apply)

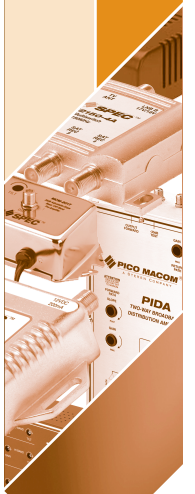
SPI-14/18-2150

400-2150 MHz Satellite Inline Power Inserters



- TruSpec power inserters supply constant DC voltage to C/Ku or DSS Satellite LNBs, microwave down-converters and in-line amplifiers
- Plug-in External UL Power Wall Adapter Included
- Input Voltage 120VAC 60Hz 35W
- Operating Frequency 400~2150 MHz
- 2 Independent Paths
- Output Voltage Selection Switch 13~14/17~18 or 17~18/17~18 VDC 600 mA
- Insertion Loss 2 dB ±1 dB
- Isolation 65 dB

Bandwidth	400~2150 MHz
Insertion Loss	2 dB
Isolation	65 dB
Input Connector	75 Ohm F-female
Output Connector	75 Ohm F-male
Input Voltage	117 VAC
Output Voltage Port 1	18 VDC
Output Voltage Port 2	14/18 VDC sw.
LNB Current Each Path	600 mA



PICO MACOM®
A STEREN COMPANY

TSMS-5/8

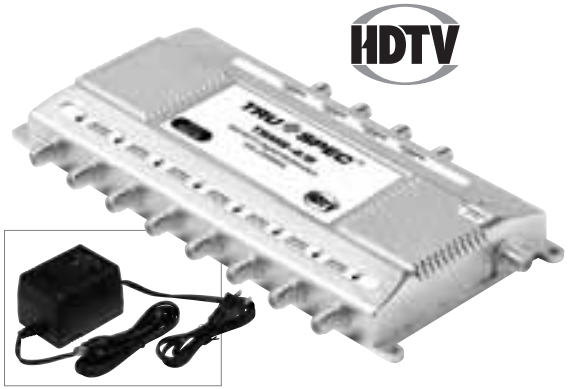
Satellite IF Multiswitch

- Wideband frequency range 40 up to 2300 MHz
- 4 satellite inputs compatible with multi-satellite services providing 4 polarities selected by receiver-supplied voltage 13~14V/17~18 VDC and 22 kHz tone
- 22 kHz continuous tone provides full compatibility with DIRECTV phase 3 ODU reception devices Satellite IF Multiswitches
- Built-in low-distortion amplifier compensates for insertion loss reducing need for external amplification
- 8 outputs enable signals to be routed to up to eight receivers
- Antenna signal combines with satellite on output, eliminating external combining, reducing cost and clutter
- Power supply included to supply voltage to LNBs

Bandwidth	54~2300 MHz
Antenna Loss	5 dB
Satellite Loss	5 dB
Isolation (input-input)	30 dB
Isolation (output-output)	25 dB
Cross Polarity	25 dB
LNB Current Capacity	600 mA
Dimensions	9.9″ x 5.3″ x 1.0″
Weight	2.8 lbs

TSMS-4/8

Satellite IF Multiswitch

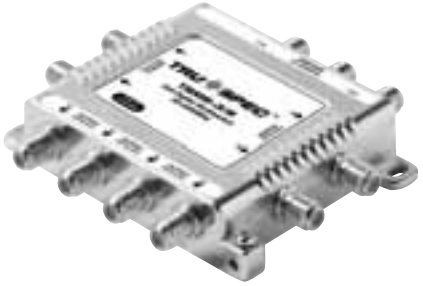


- Wideband frequency range 950 up to 2300 MHz
- 4 satellite inputs compatible with multi-satellite services providing 4 polarities selected by receiver-supplied voltage 13~14V/17~18 VDC and 22 kHz tone
- 22 kHz continuous tone provides full compatibility with DIRECTV phase 3 ODU reception devices Satellite IF Multiswitches
- Built-in low-distortion amplifier compensates for insertion loss reducing need for external amplification
- 8 outputs enable signals to be routed to up to eight receivers
- High performance SMD multi-layered printed-circuit board design ensures high port-to-port isolation to provide spurious carrier protection and to minimize undesired channel interaction
- Power supply included to supply voltage to LNBs

Bandwidth	950~2300 MHz
Satellite Loss	0 dB
Isolation (input-input)	40 dB
Isolation (output-output)	40 dB
Cross Polarity	40 dB
LNB Current Capacity	600 mA
Dimensions	9.9″ x 5.3″ x 1.0″
Weight	2.3 lbs

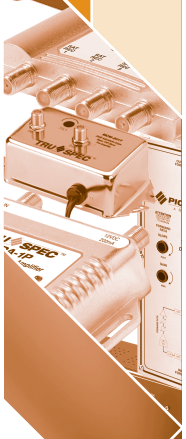
TSMS-3/8

Satellite IF Multiswitch



- Wideband frequency range 40 up to 2300 MHz
- Built-in low-distortion amplifier compensates for insertion loss reducing need for external amplification
- 8 outputs enable signals to be routed to up to eight receivers
- Ideal for use with DIRECTV and other Direct to Home satellite services providing voltage switching for polarity selection operation
- Antenna signal combines with satellite on output, eliminating external combining, reducing cost and clutter
- High performance SMD multi-layered printed-circuit board design ensures high port-to-port isolation to provide spurious carrier protection and to minimize undesired channel interaction

Bandwidth	54~2300 MHz
Antenna Loss	8 dB
Satellite Loss	12 dB
Isolation (input-input)	26 dB
Isolation (output-output)	20 dB
Cross Polarity	20 dB
LNB Current Capacity	600 mA
Dimensions	5.8″ x 5.0″ x 1.3″
Weight	0.9 lbs



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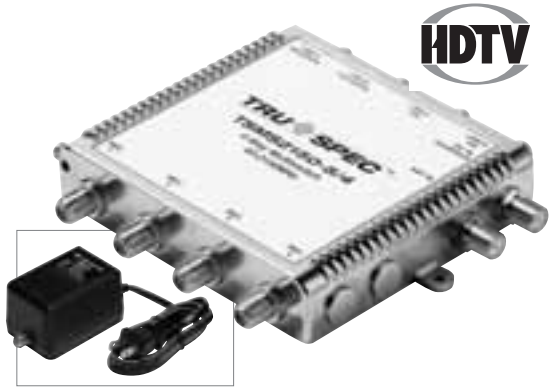
TSMS2150-5/4

Satellite IF Multiswitch



- Wideband frequency range 40 up to 2150 MHz
- 4 satellite inputs compatible with multi-satellite services providing 4 polarities selected by receiver-supplied voltage 13~14V/17~18 VDC and 22 kHz tone
- Built-in low-distortion amplifier compensates for insertion loss reducing need for external amplification
- 4 outputs enable signals to be routed to four receivers
- Antenna signal combines with satellite on output, eliminating external combining, reducing cost and clutter
- High performance SMD multi-layered printed-circuit board design ensures high port-to-port isolation to provide spurious carrier protection and to minimize undesired channel interaction
- Power supply included to supply voltage to LNBs

Bandwidth	54~2150 MHz
Antenna Gain	6 dB
Satellite Loss	10 dB
Isolation (input-input)	25 dB
Isolation (output-output)	30 dB
Cross Polarity	25 dB
LNB Current Capacity	600 mA
Dimensions	5.5″ x 5.15″ x 1.0″
Weight	1.5 lbs

TSMS2150-4A

Satellite IF Multiswitch

- Wideband frequency range 40 up to 2150 MHz
- Built-in low-distortion amplifier compensates for insertion loss reducing need for external amplification
- 4 outputs enable signals to be routed to four receivers
- Ideal for use with DIRECTV and other Direct to Home satellite services providing voltage switching for polarity selection operation
- Antenna signal combines with satellite on output, eliminating external combining, reducing cost and clutter
- High performance SMD multi-layered printed-circuit board design ensures high port-to-port isolation to provide spurious carrier protection and to minimize undesired channel interaction

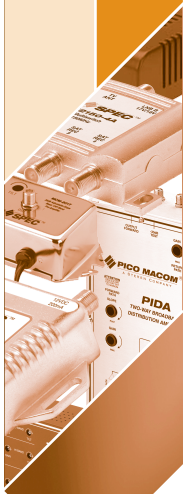
Bandwidth	54~2150 MHz
Antenna Gain	2 dB
Satellite Gain	2 dB
Isolation (input-input)	36 dB
Isolation (output-output)	26 dB
Cross Polarity	20 dB
LNB Current Capacity	600 mA
Dimensions	4.4″ x 3.6″ x 0.80″
Weight	0.5 lbs

TSMS2150-4

Satellite IF Multiswitch

- Wideband frequency range 40 up to 2150 MHz
- 4 outputs enable signals to be routed to four receivers
- Ideal for use with DIRECTV and other Direct to Home satellite services providing voltage switching for polarity selection operation
- Antenna signal combines with satellite on output, eliminating external combining, reducing cost and clutter
- High performance SMD multi-layered printed-circuit board design ensures high port-to-port isolation to provide spurious carrier protection and to minimize undesired channel interaction
- High-performance PIN diode matrix reduces polarity transfer time and digital artifacts providing consistent picture quality

Bandwidth	54~2150 MHz
Antenna Loss	7 dB
Satellite Loss	12 dB
Isolation (input-input)	35 dB
Isolation (output-output)	26 dB
Cross Polarity	25 dB
LNB Current Capacity	600 mA
Dimensions	5.8″ x 4.2″ x 0.83″
Weight	0.8 lbs



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TSMS-3/4

Satellite IF Multiswitch

- Wideband frequency range 40 up to 2300 MHz
- Built-in low-distortion amplifier compensates for insertion loss reducing need for external amplification
- 4 outputs enable signals to be routed to four receivers
- Ideal for use with DIRECTV and other Direct to Home satellite services providing voltage switching for polarity selection operation
- Antenna signal combines with satellite on output, eliminating external combining, reducing cost and clutter
- High performance SMD multi-layered printed-circuit board design ensures high port-to-port isolation to provide spurious carrier protection and to minimize undesired channel interaction

Bandwidth	54~2300 MHz
Antenna Gain	3 dB
Satellite Loss	7 dB
Isolation (input-input)	40 dB
Isolation (output-output)	30 dB
Cross Polarity	20 dB
LNB Current Capacity	600 mA
Dimensions	5.8″ x 5.0″ x 1.3″
Weight	0.8 lbs

TSMS-4C

Satellite IF Multiswitch

- Wideband frequency range 40 up to 2300 MHz
- Compact size enables placement where larger equipment won't fit
- Built-in low-distortion amplifier compensates for insertion loss reducing need for external amplification
- 4 outputs enable signals to be routed to four receivers
- Ideal for use with DIRECTV and other Direct to Home satellite services providing voltage switching for polarity selection operation
- Antenna signal combines with satellite on output, eliminating external combining, reducing cost and clutter
- High performance SMD multi-layered printed-circuit board design ensures high port-to-port isolation to provide spurious carrier protection and to minimize undesired channel interaction

Bandwidth	54~2150 MHz
Antenna Loss	14 dB
Satellite Loss	13 dB
Isolation (input-input)	25 dB
Isolation (output-output)	25 dB
Cross Polarity	20 dB
LNB Current Capacity	600 mA
Dimensions	4.4″ x 3.6″ x 0.80″
Weight	0.5 lbs

VSS-52R

5X2 Matrix Switch

- Built-in microprocessor control provides touch control instant switching of five inputs and two independent outputs
- Convenient remote control enables on-the-fly selection from up to 25 feet
- Multiple video input types provide maximum interface compatibility
- Internal amplifier ensures maintenance of high quality picture
- Quick switch status provided by front panel LED (source, output, standby)
- S-Video, composite video and L/R audio patch cable provided

Frequency Range	20Hz~10 MHz
Input Video	5 x S-video, RCA-Comp.
Input Audio	5 x RCA-Audio (L and R)
Output Video	2 x S-video, RCA-Comp.
Output Audio	2 x RCA-Audio (L and R)
Video Impedance	75 Ohm
Audio Impedance	47 Ohm
Power Input	120 VAC
Power Frequency	60 Hz
Power Required	250 mA
Dimensions	11.4″(L) x 7.3″(D) x 2.1″(H)
Weight	1.2 kg

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VSM-3/4S

Channel 3/4 Consumer Audio-Video Modulator

- Low-cost channel 3/4 auto switching A/V Modulator connects DVD, VCR, Satellite, Security video or other Video Equipment to standard TV sets with F-type RF only input connectors
- S-Video Connection provides clearer reception than standard video connection
- RCA connectors provide for easy patch cable connection
- F-type RF Connectors provides simple coax cable loop-thru
- Rear Panel Channel 3 or 4 Selection Switch reduces interference from external sources
- Low insertion loss on antenna loop through connections

Output Frequency Range	60~72 MHz
Tuning	Agile
RF Output Level (min)	5 dBmV
RF A/V Ratio	-16 dB
Spurious Output	36 dB
Frequency Stability	±10 kHz
Video Input Type	Clamped negative sync
Video Input Bandwidth	4.2 MHz
Video Input Level	1 Vp-p
Video Input Range	.5~1 Vp-p
Video Frequency Response	±1.5 dB
Video Hum and Noise	-60 dB
Audio Input Type	Monaural baseband
Audio Input Level	0.5 Vp-p
Audio Frequency Response	50~15,000 Hz
Audio Pre-emph.	75 µsec
Video Input Conn.	RCA-Fem
Audio Input Conn.	RCA-Fem
RF Output Conn.	75Ω F-Fem
Voltage Input	115 VAC
Dimensions	5.9″(L) x 3″(D) x 1.4″(H)
Weight	1 lb.

USM-20D3

UHF Consumer Agile Triple Audio-Video Modulator

- Low-cost UHF A/V Agile Modulator adds three Satellite, VCR, or Security Video channels to home distribution network over ultra-band and UHF band NTSC TV channels 14~83, CATV channels 65~139
- High Output 20 dBmV minimum, 25 dBmV typical provides ample signal for multiple consumer devices
- Excellent Frequency Stability for consistent reliable pictures
- RCA type Input and F-type output connections provide compatibility with consumer equipment

Output Frequency Range	470~890 MHz
Tuning	Agile
RF Output Level (min)	22 dBmV
RF Output Range	-15 dBmV
RF A/V Ratio	-16 dB
Spurious Output	42 dB
Frequency Stability	±10 kHz
Video Input Type	Clamped negative sync
Video Input Bandwidth	4.2 MHz
Video Input Level	1 Vp-p
Video Input Range	.5~1 Vp-p
Video Frequency Response	±1.5 dB
Video Hum and Noise	-60 dB
Audio Input Type	Monaural baseband
Audio Input Level	0.5 Vp-p
Audio Frequency Response	50~15,000 Hz
Audio Pre-emphasis	75 µsec
Video Input Conn.	RCA-Fem
Audio Input Conn.	RCA-Fem
RF Output Conn.	75Ω F-Fem
Voltage Input	115 VAC
Dimensions	5.6″(L) x 1.1″(D) x 3.9″(H)
Weight	1.75 lbs.

USM-8D

UHF Consumer Agile Audio-Video Modulator

- Low-cost UHF A/V Agile Modulator adds Satellite, VCR or Security Video channels to home distribution network over ultra-band and UHF band NTSC TV channels 14~83, CATV channels 65~139
- High Output 7 dBmV minimum, 10 dBmV typical provides ample signal for multiple consumer devices
- Excellent Frequency Stability for consistent reliable pictures
- RCA type Input and F-type output connections provide compatibility with consumer equipment
- LED Digital Display Provides simplified front panel pushbutton setup
- External UL Power Adapter Input 120V 60Hz 9W

Output Frequency Range	470~890 MHz
Tuning	Agile
RF Output Level (min)	5 dBmV
RF A/V Ratio	-16 dB
Spurious Output	46 dB
Frequency Stability	±10 kHz
Video Input Type	Clamped negative sync
Video Input Bandwidth	4.2 MHz
Video Input Level	1 Vp-p
Video Input Range	.5~1 Vp-p
Video Frequency Response	±1.5 dB
Video Hum and Noise	-60 dB
Audio Input Type	Monaural baseband
Audio Input Level	0.5 Vp-p
Audio Frequency Response	50~15,000 Hz
Audio Pre-emphasis	75 µsec
Video Input Conn.	RCA-Fem
Audio Input Conn.	RCA-Fem
RF Output Conn.	75Ω F-Fem
Voltage Input	115 VAC
Dimensions	3.4″(L) x 1.1″(D) x 3.75″(H)
Weight	1.15 lbs.

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