

Single Channel VHF and UHF Preamplifiers

CMA-b & SCMA-Ub Series



○ Features & Benefits

- Low Noise Figure
- Excellent Gain and Response Flatness
- Superior Adjacent Channel Overload Rejection
- Output Test Port for Uninterrupted Service Testing
- Ideal For All BTY Series Single Channel Antennas

The CMA-b and SCMA-Ub Single Channel Preamplifier Series are professional quality, very low noise, single channel VHF/FM and UHF preamplifiers. The CMA-b is optimized for a single VHF channel or FM Band (88-108 MHz), while the SCMA-Ub is optimized for a single UHF channel. These preamplifiers can accept a wide range of input signal levels and offer excellent gain, making these units ideal for difficult signal areas. The SCMA-Ub has an internal trap that can be factory tuned to a customer specified UHF frequency to prevent overload or intermodulation interference from strong, local channels.

The CMA-b/SCMA-Ub Single Channel Preamplifier Series are housed in a die-cast case. Input, output, and test ports are 75 Ohm, type "F" female connectors. The preamplifiers mount on a 1.5 inch O.D. (max) antenna mast with the supplied mounting hardware. Blonder Tongue PS Series -21 VDC power supplies (available separately) are used to power the preamplifiers through the downloads.

○ Specifications

	CMA-b	SCMA-Ub
Electrical		
Noise Figure (dB):	3.5 (2-6), 2.0 (FM), 2.5 max (7-13)	2.5 (14-69)
Trap Depth (dB):	NA	10
Gain (dB):	29 (2-6), 24 (FM), 26 (7-13)	25 (14-34), 24 (35-69)
Bandwidth (MHz):	6, 20 (FM)	6
Bandpass Flatness (dB):	±0.25 (2-13), 1.0 (FM)	±0.75
Selectivity (dB):	12	12
Minimum Recommended Input Level (dBmV):-	10	10.5
Input Capability (dBmV):	+35	+35
Impedance - All Ports:	75 Ω	75 Ω
General		
Power Requirements:	-21 VDC @ 40 mA	-21 VDC @ 29 mA
Recommended BT Power Supply:	PS-1526	PS-1526
Temperature Range (°C):	-40 to +60	-40 to +60
Mechanical		
Max. Mast Diameter O.D. (in.):	1.5	1.5
Dimensions		
W x H x D in.:	5.00 x 3.88 x 2.31	5.00 x 3.88 x 3.00
W x H x D mm:	127 x 99 x 59	127 x 99 x 76
Weight		
lbs:	1.31	1.31
kg:	0.60	0.60
Connectors (Common to All)		
Input:	"F" Female	"F" Female
Output:	"F" Female	"F" Female
Test:	"F" Female	"F" Female

○ Ordering Information

Model	Stock No.	Description
SCMA-Ub	4426	Preamplifier Single Channel UHF, 470-806 MHz (specify channel)
CMA-B	4706	Preamplifier Single Channel VHF/FM, 54-216 MHz (specify channel)
PS-1526	1526	Power Supply Single Output, -21 VDC @ 40 mA
PS-1536	1536	Power Supply Dual Output, -21 VDC @ 100 mA

Broadband VHF and UHF Preamplifiers

CMA Series



The CMA Broadband Preamplifier Series includes professional quality, low noise, broadband VHF & UHF preamplifiers. CMA's are available in two different models for amplification of broadband VHF and broadband UHF. The CMA Series are housed in a die-cast case. Input, output, and test ports are 75 Ohm, type "F" female connectors. The CMA's mount on a 1.5 inch O.D. (max) antenna mast with the supplied mounting hardware. Blonder Tongue PS Series -21 VDC power supplies (available separately) are used to power the preamplifiers through the downleads.

Features & Benefits

- Low Noise Figure
- Output Test Port for Uninterrupted Service Testing
- High Gain and Input Capability
- Ideal For All BTY Series Broadband Antennas

Specifications

	CMA-BB	CMA-Uc
Electrical		
Frequency Range (MHz):	54-216 (2-13)	470-806 (14-69)
Noise Figure (dB):	5.0	3.0
Gain (dB):	26	20
Bandpass Flatness (dB):	±0.7	±1.5
Min. Recommended Input Level (dBmV):	-7	-9
Input Capability (dBmV):	+25	+26
Impedance - All Ports (Ω):	75	75
Input Return Loss (dB):	11	-
Output Return Loss (dB):	8	-
General		
Power Requirements:	-21 VDC @ 50 mA	-21 VDC @ 29 mA
Recommended BT Power Supply:	PS-1536	PS-1526
Temperature Range (°C):	-40 to +60	-40 to +60
Mechanical		
Maximum Mast Diameter O.D. (in.):	1.5	1.5
Dimensions		
W x H x D in:	5.13 x 5.25 x 3.50	5.00 x 3.88 x 3.00
W x H x D mm:	130 x 133 x 89	127 x 99 x 76
Weight		
lbs.:	1.50	1.31
mm:	0.68	0.60
Connectors (Common to both)		
Input:	"F" Female	
Output:	"F" Female	
Test:	"F" Female	

Ordering Information

Model	Stock No.	Description
CMA-BB	4448 BB	Preamplifier Broadband VHF, 54-216 MHz
CMA-UC	1264	Preamplifier Broadband UHF, 470-806 MHz
PS-1526	1526	Power Supply Single Output, -21 VDC @ 40 mA
PS-1536	1536	Power Supply Dual Output, -21 VDC @ 100 mA

Preamplifier Power Supplies

PS Series



PS-1526



PS-1536

The PS-1526 and PS-1536 are professional quality, DC power supplies designed to power SCMA and CMA Series antenna preamplifiers. Both units provide -21 VDC and allow for a combined VHF and UHF feed to be diplexed with the power feed. The PS-1536 has a dual output for powering two loads, with a maximum current rating of 100 mA. The PS-1526 has a single output for powering one load, with a maximum current rating of 40 mA.

The PS-1526 and PS-1536 are housed in an aluminum case with an auxiliary AC receptacle. Both units offer regulated and surge-protected power. The PS-1536 has a panel mounted fuse, provides an additional level of short circuit protection on the regulator and a clamped output voltage to protect connected loads.

Specifications

PS-1536

RF

Thru-Line Insertion Loss
VHF (10-300 MHz): 0.2 dB
UHF (470-806 MHz): 0.2 dB
Thru-Line Return Loss
VHF (10-300 MHz): 20 dB
UHF (470-890 MHz): 20 dB
Isolation Between Outputs:
10-700 MHz: 50 dB
700-806 MHz: 35 dB

Impedance: 75 Ω

Electrical

Output Voltage: -21 VDC
Current @ 105 VAC Input: 100 mA

General

Power Requirements:
117 VAC, ± 10 %, 60 Hz, 0.11 A
Temperature Range: 0 to +50 $^{\circ}\text{C}$

Mechanical

Dimensions (W x H x D):
8.25 x 3.50 x 2.25 in.
210 x 89 x 57 mm
Weight: 2.00 lbs., 0.91 kg

Connectors

Input: "F" Female
Output: "F" Female

PS-1526

RF

Thru-Line Insertion Loss
VHF (10-300 MHz): 0.3 dB
UHF (470-806 MHz): 0.5 dB
Thru-Line Return Loss
VHF (10-300 MHz): 26 dB
UHF (470-890 MHz): 22 dB
Impedance: 75 Ω

Electrical

Output Voltage: -21 VDC
Current @ 105 VAC Input: 40 mA

General

Power Requirements:
117 VAC, ± 10 %, 60 Hz, 0.07 A
Temperature Range: 0 to +50 $^{\circ}\text{C}$

Mechanical

Dimensions (W x H x D):
4.75 x 3.25 x 2.75 in.
121 x 83 x 70 mm
Weight: 1.25 lbs., 0.57 kg

Connectors

Input: "F" Female
Output: "F" Female

Ordering Information

Model	Stock No.	Description
PS-1526	1526	Power Supply Single Output, -21 VDC @ 40 mA
PS-1536	1536	Power Supply Dual Output, -21 VDC @ 100 mA