

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**To reduce the risk of electric shock, do not remove cover from this unit.  
No user-serviceable parts inside. Refer servicing to qualified service personnel.**

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE**

#### **NOTE TO CATV SYSTEM INSTALLER**

This reminder is provided to call the CATV System Installers attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

### ***Description***

The RMDA series of 19" rack mount amplifiers are completely self-contained broadband distribution amplifiers, designed specifically for signal distribution systems requiring the low distortion characteristics only available using hybrid CATV integrated circuits. Useful either in systems which use a "cable drop" as a signal source or as the launch amplifier in a headend, these amplifiers are available in three gain-versions, 15dB, 30dB and 50 dB, with four different bandwidths, 47 to 450 MHz, 47 to 550 MHz, 47 to 750 MHz or 47 to 860 MHz.

These amplifiers are available with one or two hybrid amplifier gain blocks. The use of two gain block units with interstage controls provides superior noise performance along with an extended range of gain and slope. The single gain units provide good electrical performance at a modest price. The combination of these two architectures in the RMDA line results in models with a wide range of performance features to satisfy simple or stringent applications. In addition, there are 30 dB gain versions with power doubling hybrids which increase the output level capability by 3 dB thereby increasing the reach.

The series provides flat operating gain which can be reduced with a variable attenuator. Gain and slope controls are located on the front panel for fast set-up and adjustment.

Two 30 dB backmatched test points are provided to permit testing without interruption of service. (Test points are not available on the lower performance units).

Push-pull, hybrid IC modules enable the RMDA to operate at high output levels while retaining low distortion characteristics.

The aluminum chassis is designed to provide excellent heat dissipation, thus allowing operation at high ambient temperatures with no degradation of performance or reliability.

### ***Features***

- Rack Mount Versions of BIDA and ACA Series Amplifiers
- Three Gain Version, 15 dB, 30 dB and 50 dB
- 450 MHz, 550 MHz, 750, and 860 MHz Units
- Hybrid IC Circuitry for High Output with Low Distortion
- Exceptional Temperature Stability Range
- Front Panel Gain and Slope Controls for Easy Adjustment
- Aluminum Chassis Designed for Superior Heat Dissipation
- Single or Dual Hybrid Models
- Twelve Rack Mount Units
- Available for Power Doubling Hybrids

Model: RMDA	450-30	450-50	550-30	550-50	450-30P	550-30P	450-30S	550-30S	750-15S	750-30	750-30P	860-30
Stock No.	5500-43	5500-45	5500-53	5500-55	5500P43	5500P53	5500S43	5500S53	5500S71	5500-73	5500P73	5500-83
Frequency Range (MHz)	47-450	47-450	47-550	47-550	47-450	47-550	47-450	47-550	47-750	47-750	47-750	47-860
Gain	33	50	33	50	33	33	33	33	16	31	31	31
Flatness	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	± 0.75	± 1.0	± 1.0	± 1.0	± 1.0
d Gain Control Range	15	15	15	15	15	15	15	15	15	15	15	15
B Slope Control Range	10	10	10	10	10	10	10	10	10	10	10	10
Input Return Loss	14	14	14	14	14	14	14	12	14	14	14	14
Output Return Loss	14	14	14	14	14	14	14	12	14	14	14	14
Noise Figure	6.0	6.0	7.0	7.0	6.0	7.0	7.5	8.0	7.5	8.0	8.0	8.0
No. of Channels>Loading)	60	60	77	77	60	77	60	77	110	110	110	129
Output Level (dBmV)	+ 46	+ 46	+ 44	+ 44	+ 46	+ 44	+ 46	+ 44	+ 44	+ 44	+ 44	+ 44
Composite Triple Beat (dB) [CTB]	- 60	- 60	- 60	- 59	- 66	- 66	- 60	- 59	- 55	- 55	- 60	- 50
Crossmodulation(dB) [XMOD]	- 61	- 61	- 61	- 60	- 68	- 68	- 61	- 61	- 58	- 58	- 64	- 50
Composite 2nd Order (dB) [CSO]	- 60	- 60	- 60	- 57	- 67	- 62	- 60	- 59	- 55	- 55	- 60	- 56
Hum Modulation	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65	- 65
Input/Output Test Point Level (dB)	- 20	- 20	- 20	- 20	- 20	- 20	N / A	N / A	N / A	- 20	- 20	- 20
Operating Temperature Range	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C	-20° to +60° C
Number of Hybrids	2	2	2	2	2	2	1	1	1	2	2	2
Type of Hybrids	Push-Pull	Push-Pull	Push-Pull	Push-Pull	Power Doubling	Power Doubling	Push-Pull	Push-Pull	Push-Pull	Push-Pull	Power Doubling	Push-Pu
Power Requirements	105-130 VAC @ 0.2 A	105-130 VAC @ 0.25 A	105-130 VAC @ 0.2 A	105-130 VAC @ 0.25 A	105-130 VAC @ 0.35 A	105-130 VAC @ 0.35 A	117 ± 10 % @ 0.25 A	117 ± 10 % @ 0.25 A	105-130 VAC @ 0.25 A	105-130 VAC @ 0.35 A	105-130 VAC @ 0.35 A	105-130 VA @ 0.35 A
Dimensions	19" W x 1 3/4" H x 5 1/8" D											
Shipping Weight	8 lbs											
RF Connectors	"F" Type											