

MDA100

1 GHz MULTI-DWELLING RF AMPLIFIER



FEATURES

- Enables high forward bandwidth up to 1003 MHz
- Supports return bandwidth with optional 85 MHz return
- Maximize installation locations with space-saving compact housing
- Simplify installation with elimination of RF accessories for alignment
- Flexible powering in MDU installations with included 100 to 240 VAC MAINs power supply



PRODUCT OVERVIEW

The ARRIS MDA-100 Multi-Dwelling Amplifier platform meets the needs of today's expanding broadband communication networks. Designed for HFC network installations in apartment buildings, condominiums, and other multiple-dwelling housing units, this highgain, compact indoor distribution amplifier is available with a bandwidth of up to 1003 MHz for improved system performance. To save space, technicians can easily wall-mount the MDA-100 amplifier using the housing's external mounting brackets.

The single-output amplifier features variable attenuator and equalizer facilities for greater flexibility when adjusting the amplifier. The unit includes standard F-type input and output connector ports, as well as an active return path for use in today's advanced networks. The MDA-100 also features a return path, three-state attenuator to help minimize cable modem output levels. The mains-powered MDA-100 amplifier features a field-replaceable, auto-ranging switching power supply, which can accept input voltages from 100 to 240 V at frequencies of 50 or 60 Hz without adjustment.

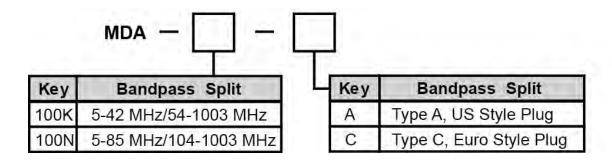




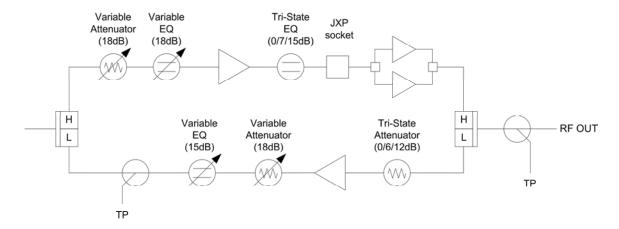
SPECIFICATIONS		
	Forward	Return
Operational Bandwidth	54 to 1003 MHz	5 to 85 MHz
Bandwidth Splits	K (54 – 1003 MHz) N (104 – 1003 MHz)	K (5 – 42 MHz) N (5 – 85 MHz)
Typical Full Gain	37 dB	Gain: 27 dB
Noise Figure	8 dB	9 dB
nput Attenuator	0 ~ 18 dB	0 ~ 18 dB
Input Equalizer	0 ~ 18 dB	0 ~ 15 dB
Tri-State Mid-Stage EQ	0/7/15 dB	Tri-State Attenuator: 0/6/12 dB
Flatness	± 1.0	± 0.75
RF Output Return Loss	14 dB	14 dB
RF Output Test Points	20 ± 1.2 dB	20 ± 1.2 dB
RF Output Impedence	75 Ω	75 Ω
Reference Output Level Composite Triple Beat (CTB) Cross Slope Optimization (CSO)	48 dBmV* ≤ -66 dBc* ≤ -66 dBc*	*Note: NTSC 79 channels with QAM to 1 GHz, output level 48 dBmV (virtual) at 1 GHz, 15 dB tilt
Weight	<2 lb	
Mounting	Wall	
Connector	F-type Female	
Nater/Dust Ingress Rating	IP54	
Power Consumption	15 W	
Gurge	(IEEE C62.41, 1.2/50us Combination Wave, ±6kV)	
Operating Temperature Range	-20°C to +55°C	
iupply voltage, MAINS powered	100 − 240 VAC, 50 ~ 60 Hz	
RoHS Compliant		



1 GHz MDA Ordering Guide



Block Diagram



RELATED PRODUCTS		
CHP Chassis	Optical Patch Cords	
Power Supplies	Optical Passives	
Control Module	Installation Services	

Note: Specifications are subject to change without notice.

Copyright Statement: ©ARRIS Enterprises, Inc. 2014 All rights reserved. No part of this publication may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from ARRIS Enterprises, Inc. ("ARRIS"). ARRIS reserves the right to revise this publication and to make changes in content from time to time without obligation on the part of ARRIS to provide notification of such revision or change. ARRIS and the ARRIS logo are all trademarks of ARRIS Enterprises, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.

MDA100_DS_21NOV14

