

ARRIS RF AMPLIFIER

MDA-100*
1 GHz MULTI-DWELLING 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



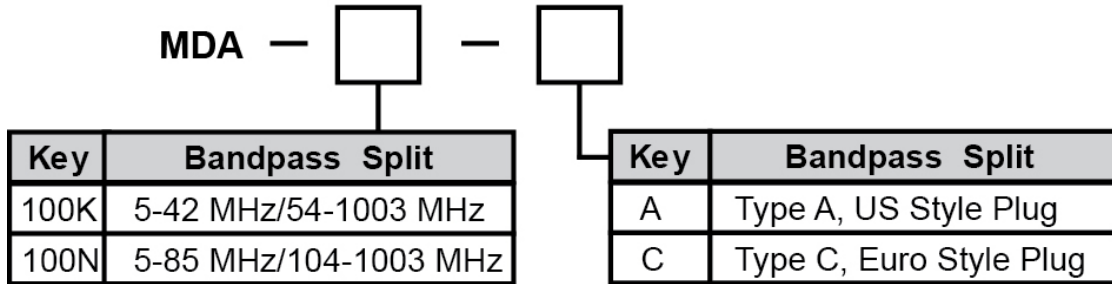
PRODUCT OVERVIEW

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 high-gain, 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.

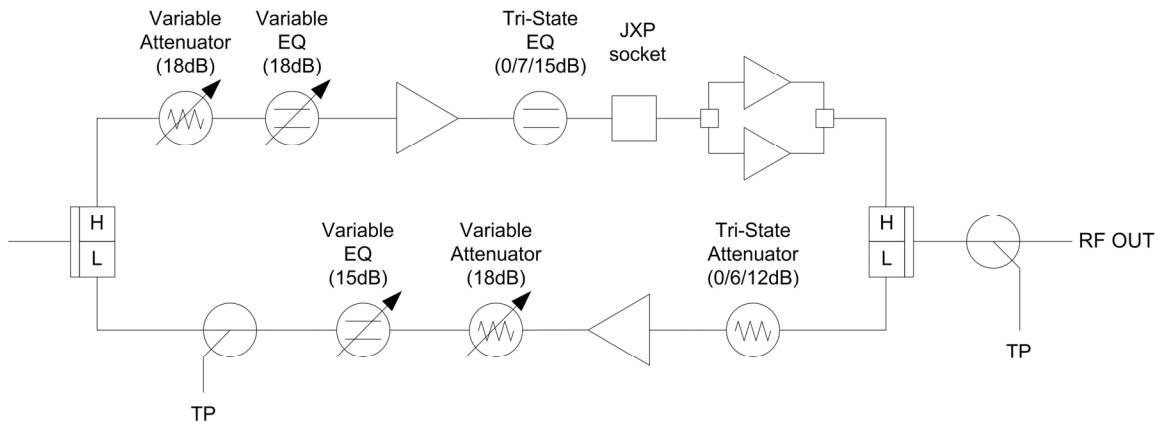
The single-output amplifier features variable attenuator and equalizer facilities for greater flexibility when adjusting the amplifier. The unit includes standard F-type input and output connector ports, as well as an active return path for use in today's advanced networks. The MDA-100 also features 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
Input 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 Impedance	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
Water/Dust Ingress Rating		IP54
Power Consumption		15 W
Surge		(IEEE C62.41, 1.2/50us Combination Wave, ±6kV)
Operating Temperature Range		-20°C to +55°C
Supply 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.

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