

DDA D31 Series Cable TV Drop Amps for DOCSIS 3.1 Systems



The Toner DDA D31 Series Digital Drop Amplifiers are the latest addition to the Toner range of DOCSIS 3.1 compatible products. These drop amplifiers have a frequency range of 5 to 1220 MHz with a reverse or upstream bandwidth of 5-85 MHz. Two models are available, one with passive reverse and one with 8 dB gain in reverse.

Features

- 2 Way Drop Amplifiers
- 5-1220 MHz
- 102-1220 MHz Forward
- 15 dB Forward Gain
- DOCSIS 3.1 System Compatible
- 5-85 MHz Reverse
- Passive or 8 dB Reverse Gain
- Very Low Distortions
- Water Resistant Connectors
- -100 dB RFI
- 6 kVA Ring Surge Capacity
- 12-15 VDC Powered
- 6' Coax Jumper Included
- UL Listed Power Transformer Included
- Remote Powering Via Output Cable

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		DDA-1501AD31		DDA-1501D31		Unit	Note
		Typical	Worst	Typical	Worst		
Forward Path		102-1220				MHz	
Gain	102-1002 MHz	15	14	15	14	dB	Amp Powered
Gain	1002-1218 MHz	14	13	14	13		
Flatness	102-1002 MHz	±0.5	±0.75	±0.5	±0.75	dB	
Flatness	1002-1218 MHz	±1.0	±1.5	±1.0	±1.5		
CTB	102-1002 MHz	-75	-70	-75	-70	dBc	
CSO	102-1002 MHz	-65	-62	-65	-62		
XMOD	102-1002 MHz	-75	-70	-75	-70	dB	
CCN	102-1002 MHz	-55		-55			
Noise Figure	102-1002 MHz	3	4	3	4	dB	
Group Delay	Any Channel	20		20			ns
Return Path		5-85				MHz	
Gain	5-85 MHz	10	9	Passive		dB	Amp Powered
Flatness	5-85 MHz	±0.75		±0.75			
DSO	5-85 MHz	-70	-65	-70	-65	dBc	2
DTO	5-85 MHz	-60	-57	-60	-57		
Noise Figure	5-85 MHz		8			dB	
Group Delay	5-85 MHz		20		20		ns
General							
Impedance		75				Ohm	
Return Loss	5-85/102-1002 MHz	20	18	20	18		
	1002-1218 MHz	10		10		dB	
Hum Modulation	5-85/102-1218 MHz	-70		-70			
Power Supply Noise		-50/-80/-100				dBm	3
Unterminated Oscillation		NONE					
RFI	5-1002 MHz	-100				dBc	
CE Compliance		ROHS, WEEE, EMC, LVD					
Surge Withstand Capability		6kV 3kA, 80/20us Combo Wave IEEE 587 (C62.41-1991) Category B3 Standard					Forward Input & Power Pack
		6kV 200A, 0.5-100KHz Combo Wave IEEE 587 (C62.41-1991) Category A3 Standard					Forward Outputs
Operating Temperature		-40 to +60					°C
DC Power Consumption		280		150			15Vdc
Port Diode Protection		Yes					
Waterproof		Withstand 15 psi for 1 minute					All F Ports

- (1) 10dBmV/ch flat input level (75 NTSC) + digital at 6dB setback (550-1002MHz)
- (2) as per SCTE115, 13&19MHz channels at 58dBmV/ch output, w/c of DSO at 6/32MHz and DTO at 7/25MHz
- (3) max for (DC-500kHz) / (500kHz-1.5MHz), measure at RF OUT while using power insertere to power the amplifier
- (4) no oscillations should occur with IN and OUT ports terminated and unterminated