



The 500ADA-EQ Analog Video Distribution Amplifier is a general purpose amplifier for distributing 75 $\Omega$  analog video signals.

The 500ADA-EQ is housed in the 3RU 500FR **exponent** frame that will hold up to 16 modules.

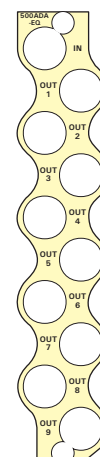
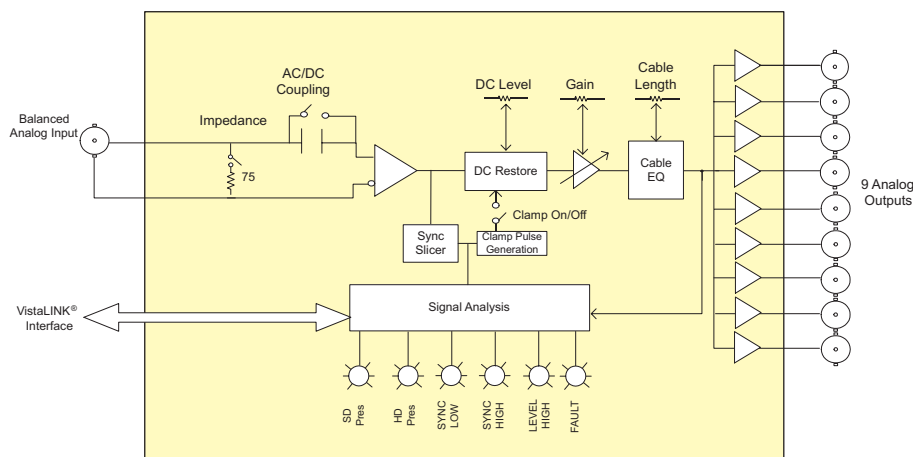
The 500ADA-EQ features one balanced equalized input with nine unbalanced outputs. The 500ADA-EQ amplifier has been designed to distribute a wide range of analog video signals. It can also distribute other pulses and signals that are less than 2V p-p.

### Features & Benefits

- 75 $\Omega$  or high impedance input (jumper selectable)
- High common mode range and common mode rejection ratio (CMRR)
- Gain control
- Jumper selectable AC or DC coupling
- Jumper selectable fast or slow back porch clamp
- DC level control when clamp is enabled
- Cable equalizer adjustment range: 0 to 300m of 8281 or 1694
- Looping feature with external "T" connector
- Consistent input impedance if card power is lost
- VistaLINK® capable for remote monitoring via SNMP (using VistaLINK® PRO) when installed in 500FR frame with 500FC VistaLINK® Frame Controller

#### Card Edge LEDs

- Module status/Local Fault
- Power supply status
- EQ Warning



### Specifications

#### Analog Video Input:

Standards: Any analog video format, up to 2V p-p and 30MHz bandwidth  
Connector: 1 BNC per IEC 60169-8 Amendment 2  
Common mode range: > 6V p-p  
CMRR: > 70dB to 1kHz  
Signal amplitude: 2.5V p-p max  
Cable equalizer: 0 to 300m of Belden 8281 or 1694A cable  
Impedance: 75 $\Omega$  terminated, 35k $\Omega$  Hi-Z (jumper selectable)  
Coupling: AC or DC (jumper selectable)  
Return loss: > 40dB to 10MHz, > 30dB to 30MHz  
Clamp range: >  $\pm$ 600mV  
Fast clamp attenuation of 60Hz: > 36dB

#### Analog Video Outputs:

Number of Outputs: 9 Per Card  
Connector: BNC per IEC 60169-8 Amendment 2  
Output impedance: 75 $\Omega$   
Gain control range:  $\pm$ 5dB  
DC Level: <  $\pm$ 100mV (with DC Coupling active and back porch clamp disabled)  
DC Level Control range: <  $\pm$  200mV (with back porch clamp enabled)  
Freq. Response: <  $\pm$ 0.05dB no equalization  
<  $\pm$ 0.09dB for 5 to 100m Belden 8281 or 1694A (to 5.5MHz)  
<  $\pm$ 0.15dB for 100 to 300m Belden 8281 or 1694A (to 5.5MHz)  
Differential Gain: < 0.17% 0 to 300m  
Differential Phase: < 0.19° 0 to 300m

C/L gain inequality: <  $\pm$ 0.1% for all cable lengths  
C/L Delay: <  $\pm$ 2ns  
Output isolation: > 42dB to 10MHz, > 32dB to 30MHz  
Output return loss: > 40dB to 30MHz  
Noise performance: < -78dB RMS NTC7 weighting, < -70dB RMS 15kHz to 5.5MHz

#### Electrical:

Voltage: +12V DC  
Power: 1.2W  
EMI/RFI: Complies with FCC Part 15 Class A EU EMC Directive

#### Physical:

Number of Slots: 1

### Ordering Information

500ADA-EQ Analog Video Distribution Amplifier with Cable Equalization (1x9)

Enclosures  
500FR  
S501FR

**exponent**  
Compact High Density Distribution Frame  
Standalone enclosure