

# 500DA2Q-3G

## 3G/HD/SD-SDI Dual Reclocking Distribution Amplifier (32-1x4 DAs in 3RU Rack Space)



The 500DA2Q-3G Dual 3G/HD/SD-SDI Reclocking Distribution Amplifier provides the highest density DA in the industry allowing up to 32-3Gb/s, HD-SDI or SD-SDI Distribution amplifiers in a 3RU rack space. This module provides inexpensive distribution of your SMPTE ST 424 (3Gb/s), SMPTE ST 292-1 (1.5Gb/s), SMPTE ST 259-1 (270Mb/s), DVB-ASI or SMPTE ST 310-1 (19.4Mb/s) or any other SDI signal within the 143Mb/s to 1.5Gb/s range.

The 500DA2Q-3G features two auto-equalized inputs and can be individually set via jumpers for either reclocking or non-reclocking.

The 500DA2Q-3G is housed in the 500FR **exponent** frame that will hold up to 16 modules.

### Features & Benefits

- Normal reclocked mode for SMPTE ST 424 (3Gb/s), SMPTE ST 292-1 (1.5Gb/s) and SMPTE ST 259-1 (270Mb/s)
- Jumper selectable non-reclocked mode for all other SMPTE ST 344-1, SMPTE ST 259-1, SMPTE ST 310-1 and DVB-ASI data rates
- Fully hot-swappable from front of frame with no BNC disconnect required
- Independent isolated output drivers to ensure no cross channel loading effects (i.e. no need to terminate unused outputs)
- Outputs maintain polarity from input to output for DVB-ASI applications
- Tally output on Frame Status bus upon loss of input signal for quality monitoring
- VistaLINK® -capable for remote monitoring via SNMP (using VistaLINK® PRO) when installed in 500FR frame with 500FC VistaLINK® Frame Controller

- SMPTE ST 344-1 (540Mb/s), SMPTE ST 259-1 (360Mb/s, 143Mb/s), SMPTE ST 310M-1
- (19.4Mb/s), DVB-ASI when not re-clocking
- Return Loss > 15dB to 1.5GHz and > 10dB up to 3GHz
- Auto equalization to 80m at 3Gb/s, 100m @ 1.5Gb/s and 350m @ 270Mb/s

### Outputs

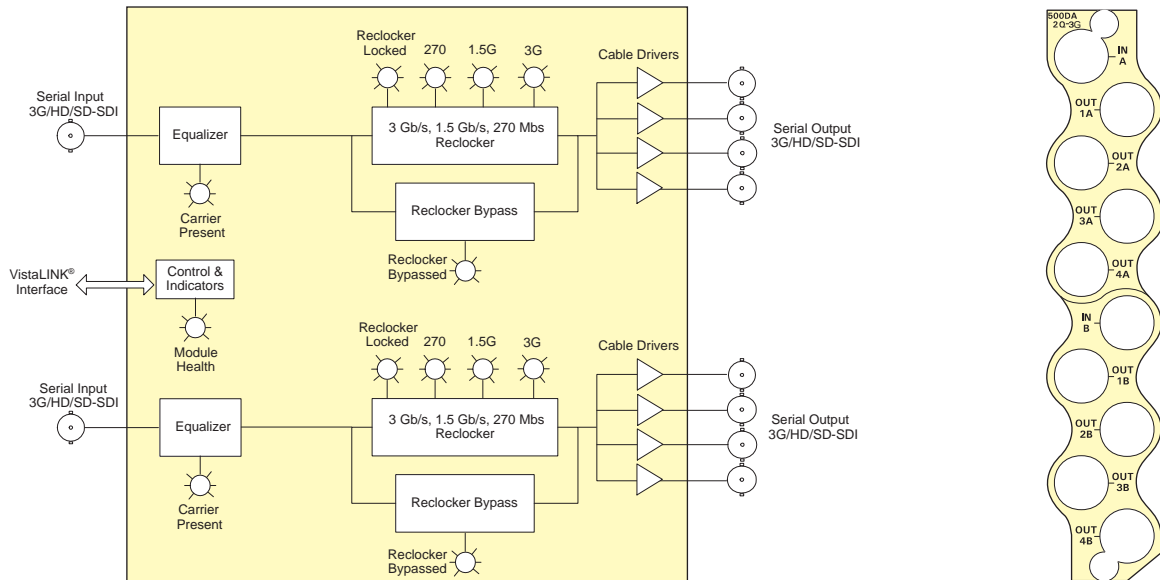
- Four reclocked outputs per input
- Return Loss > 10dB to 1.5GHz
- Wideband jitter < 0.2 UI

### Card Edge LEDs

- Reclocker rate (3 LEDs)
- Reclocker locked
- Reclocker bypass
- Module Health Status

### Input

- Two inputs
- SMPTE 424M (3Gb/s), SMPTE ST 292-1 (1.5Gb/s), SMPTE ST 259-1 (270Mb/s) when set to re-clocking mode.



### Specifications

<b>Serial Video Input:</b> Standards Reclocked Mode:	SMPTE ST 424 (3Gb/s), SMPTE ST 292-1 (1.5Gbs), SMPTE ST 259-1 (270Mb/s)	Input B:	Automatic to 80m @ 3Gb/s, 150m @ 1.5Gb/s and 350m @ 270Mb/s with Belden 1694A or equivalent cable	Overshoot:	< 10% of amplitude
Non Reclocked Mode:	SMPTE ST 344-1 (540Mb/s), SMPTE ST 259-1 (360Mb/s, 143Mb/s), SMPTE ST 310-1 (19.4Mb/s), DVB-ASI	Return Loss:	> 15dB up to 1.5GHz > 10dB up to 3GHz	Return Loss:	> 10dB up to 1.5GHz
Connector:	2 BNC per IEC 61169-8 Annex A	<b>Serial Video Outputs:</b>		Wideband Jitter:	< 0.2 UI HD < 0.3 UI 3G
Equalization:		Number of Outputs:	4 reclocked from each input. Reclockers can be bypassed separately for each input.	<b>Electrical:</b>	
Input A:	Automatic to 65m @ 3Gb/s, 100m @ 1.5Gb/s and 350m @ 270Mb/s with Belden 1694A or equivalent cable	2x4 Mode:	4 reclocked from each input. Reclockers can be bypassed separately for each input.	Voltage:	+12V DC
		Connector:	BNC per IEC 61169-8 Annex A	Power:	6W
		Signal Level:	800mV nominal	EMI/RFI:	Complies with FCC Part 15 Class A EU EMC Directive
		DC Offset:	0V ±0.5V	<b>Physical:</b>	
		Rise & Fall Time:	200ps nominal	Number of slots:	1

### Ordering Information

**500DA2Q-3G** 3G/HD/SD SDI Dual Reclocking Distribution Amplifier (32-1x4 DAs in 3RU Rack Space)

**Enclosures**  
500FR  
S501FR

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

**Accessories**  
500FC VistaLINK® Frame Controller  
CP-2116E-H Remote Control Panel  
CP-2232E Remote Control Panel