

500DA2Q-3G

3G/HD/SD-SDI Dual Reclocking Distribution Amplifier (32-1x4 DAs in 3RU Rack Space) **Cat Gen 2016**



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

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.

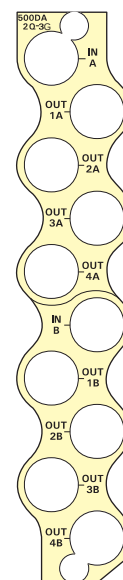
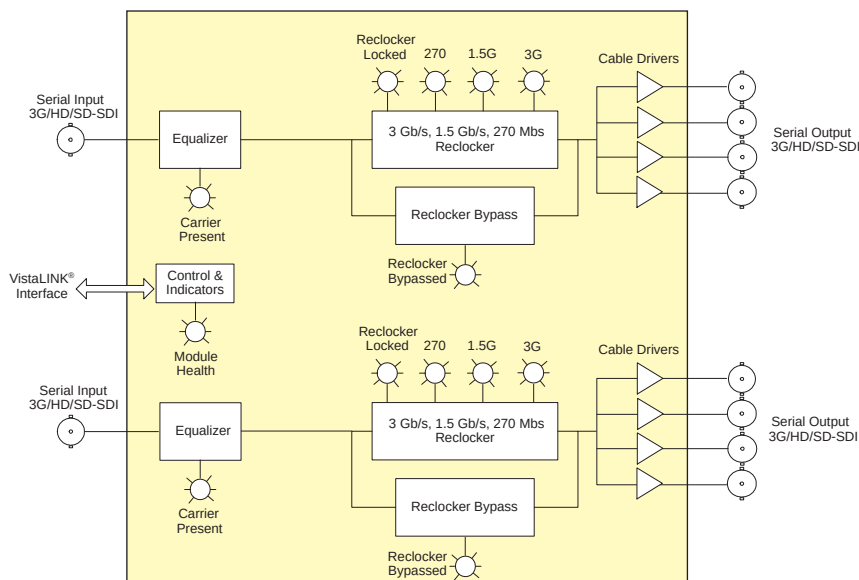
- SMPTE ST 344-1 (540Mb/s), SMPTE ST 259-1 (360Mb/s, 143Mb/s), SMPTE ST 310M-1
- (19.4Mb/s), DVB-ASI when not re-clocking
- Return Loss > 15dB to 1.5GHz and > 10dB up to 3GHz
- Auto equalization to 80m at 3Gb/s, 100m @ 1.5Gb/s and 350m @ 270Mb/s

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



Specifications

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

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



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 424M (3Gb/s), SMPTE 292M (1.5Gb/s), SMPTE 259M (270Mb/s), DVB-ASI or SMPTE 310M (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 424M (3Gb/s), SMPTE 292M (1.5Gb/s) and SMPTE 259M (270Mb/s)
- Jumper selectable non-reclocked mode for all other SMPTE 344M, SMPTE 259M, SMPTE 310M 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

Input

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

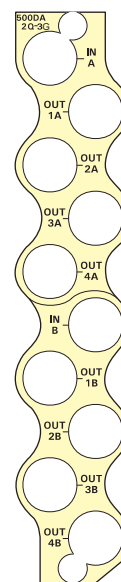
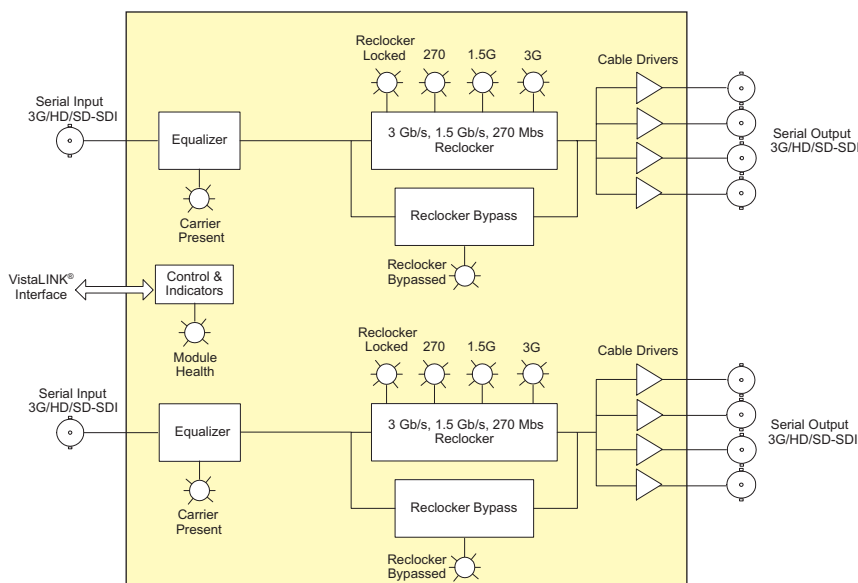
- SMPTE 344M (540Mb/s), SMPTE 259 (360Mb/s, 143Mb/s), SMPTE 310M (19.4Mb/s), DVB-ASI when not re-clocking
- Return Loss > 15dB to 1.5GHz and > 10dB up to 3GHz
- Auto equalization to 80m at 3Gb/s, 140m @ 1.5Gb/s and 350m @ 270Mb/s

Outputs

- 4 reclocked outputs per input
- Return Loss > 15dB to 1.5GHz
- Wideband jitter < 0.2 UI

Card Edge LEDs

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



Specifications

Serial Video Input:

Standards
 Reclocked Mode: SMPTE 424M (3Gb/s), SMPTE 292M (1.5Gb/s), SMPTE 259M (270Mb/s)
 Non Reclocked Mode: SMPTE 344M (540Mb/s), SMPTE 259M (360Mb/s, 143Mb/s), SMPTE 310M (19.4Mb/s), DVB-ASI
 Connector: 2 BNC per IEC 61169-8 Annex A
 Equalization:
 Input A: Automatic to 65m @ 3Gb/s, 125m @ 1.5Gb/s and 350m @ 270Mb/s with Belden 1694A or equivalent cable
 Input B: Automatic to 80m @ 3Gb/s, 150m @ 1.5Gb/s and 350m @ 270Mb/s with Belden 1694A or equivalent cable
 Return Loss: > 15dB up to 1.5GHz
 > 10dB up to 3GHz

Serial Video Outputs:

Number of Outputs:
 2x4 Mode: 4 reclocked from each input. Reclockers can be bypassed separately for each input.
 Connector: BNC per IEC 61169-8 Annex A
 Signal Level: 800mV nominal
 DC Offset: 0V ±0.5V
 Rise & Fall Time: 200ps nominal
 Overshoot: < 10% of amplitude
 Return Loss: > 10dB up to 1.5GHz
 Wideband Jitter: < 0.2 UI HD
 < 0.3 UI 3G

Electrical:

Voltage: +12V DC
 Power: 6W
 EMI/RFI: Complies with FCC Part 15 Class A
 EU EMC Directive

Physical:

Number of slots: 1

Ordering Information

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 Compact High Density Distribution Frame
 Standalone enclosure