

# 500FC-DA-HD-L

## VistaLINK® Frame Controller with HD/SD-SDI DA with Loop Thru

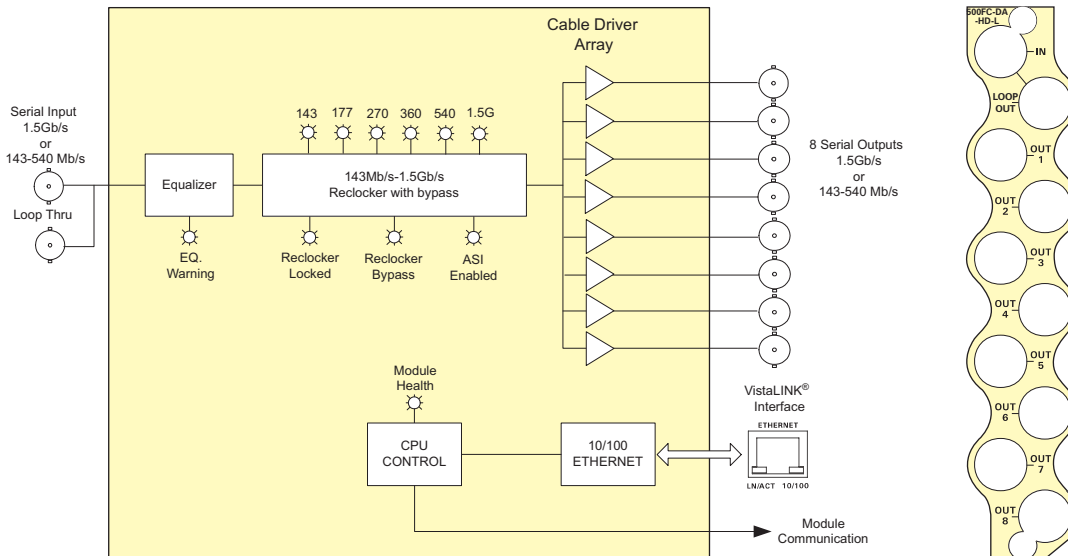


The 500FC-DA-HD-L Frame Controller and Distribution Amplifier with Loop Thru module provides a single point of access to communicate with VistaLINK®-capable 500 series of modules. The 500FC-DA-HD-L provides a 10Base-T/100 Base-TX Ethernet port and communication is facilitated through the use of Simple Network Management Protocol (SNMP). The 500FC-DA-HD-L handles all SNMP communication between the frame (500FR-L-D) and the network management system (NMS), and serves as a gateway to individual cards in the frame (500FR-L-D frame). The module also provides an RS-232 serial port as the cards edge to set up the network interface.

In addition to the 500FC-DA-HD-L provides an on-board reclocking distribution amplifier for HD/SD-SDI video signals at rates of 1.5Gb/s and 143Mb/s to 540Mb/s. The distribution amplifier features an auto-equalizing input with eight re-clocked outputs and a single passive loop thru. It has been designed for use as a SMPTE 292M (1.5 Gb/s), DVB-ASI or SMPTE 259M distribution product.

### ►Features & Benefits

- Mode for SMPTE 292M (1.5Gb/s) or SMPTE 259M (143-360Mb/s)
- 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)
- Module health and Status LEDs
- Carrier Present LEDs for each DA channel
- Tally output on Frame Status bus upon loss of input signal
- Complies with IEEE 802.3 100Base-TX and 10Base-T Ethernet standards
- 100Mb/s Fast Ethernet or 10Mb/s Ethernet data transfer, selected by auto-negotiation
- Full duplex or half-duplex operation, selected by auto negotiation
- RJ-45 connector for network cable connection
- Card edge RS-232 serial control port for configuration
- Rear panel LEDs indicate Ethernet link, activity and speed
- Provides frame/chassis status information through enabled hardware via
- VistaLINK® including frame status, card insertion/removal counters, and 500FC-DA-HD-L software version number



### ►Specifications

#### Serial Video Inputs:

Standards: SMPTE 292M, SMPTE 259M-A, B, C, D (143 to 540Mb/s) or DVB-ASI  
Connector: 1 BNC per IEC 61169-8 Annex A  
Equalization: Automatic to 100m @ 1.5Gb/s  
Return Loss: >15dB up to 1.0Gb/s  
>10dB up to 1.5Gb/s

#### Serial Video Outputs:

Number of Outputs: 8 (Optionally reclocked)  
Connector: BNC per IEC 61169-8 Annex A  
Signal Level: 800mV nominal  
DC Offset: 0V ±0.5V  
Rise and Fall Time: 200ps nominal  
Overshoot: < 10% of amplitude  
Return Loss: > 15dB up to 1.0Gb/s  
> 12dB up to 1.5Gb/s  
Wide Band Jitter: < 0.2 UI

#### Ethernet:

Network Type: Fast Ethernet 100 Base-TX IEEE 802.3u standard for 100Mb/s baseband CSMA/CD local area network  
Ethernet 10 Base-T IEEE 802.3 standard for 10Mb/s baseband CSMA/CD local area network  
Connector: RJ-45

#### Serial Communications:

Standard: RS-232  
Connector: 9-Pin Female D connector on upgrade breakout cable (provided with 500FR)  
Baud Rate: 57,600  
Format: 8 bits, no parity, 2 stop bits, no flow control

#### Electrical:

Voltage: +12V DC  
Power: 5.5W  
EMI/RFI: Complies with FCC Part 15 Class A and EU EMC directive

#### Physical:

Number of slots: 1

### ►Ordering Information

**500FC-DA-HD-L** VistaLINK® Frame Controller and HD/SD-SDI Reclocking Distribution Amplifier with Loop Thru

**Enclosures**  
**500FR-L-D**

**exponent**  
Compact High Density Distribution Frame with loop (digital)