The 500FC-DA-HD Frame Controller with Distribution Amplifier card provides a single point of access to communicate with VistaLINK® -capable 500 series of cards. The 500FC-DA-HD provides a 10Base-T/100Base-TX Ethernet port and communication is facilitated through the use of Simple Network Management Protocol (SNMP). The 500FC-DA-HD handles all SNMP communications between the frame (500FR) and the network manager (NMS), and serves as a gateway to individual cards in the frame. The 500FC-DA-HD also provides an RS-232 serial port at the card edge to set up the network addresses.
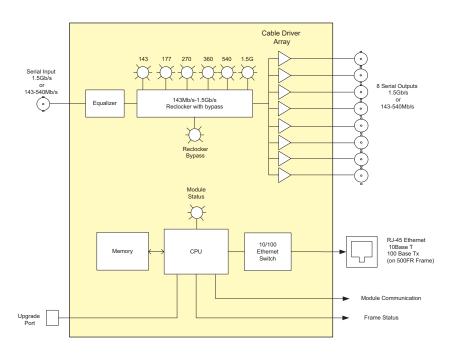
In addition the 500FC-DA-HD provides an on board reclocking distribution amplifier for HD/SD video signal at rates of 1.5Gb/s and 143Mb/s to 540Mb/s. The DA features an auto-equalized input with eight reclocked outputs and has been designed for use as a SMPTE 292M (1.5Gb/s), DVB-ASI or SMPTE 259M distribution product.
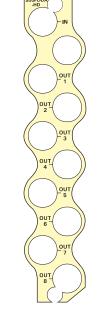
▶Features & Benefits

• 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

• Front panel LEDs indicate module fault
• 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 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 to140m @ 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 100 Mbps baseband CSMA/CD local area network Ethernet 10 Base-T IEEE 802.3 standard for 10 Mbps 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 (must be in slot 1 of 500FR)

▶Ordering Information

500FC-DA-HD	VistaLINK® Frame Controller with HD/SD-SDI Reclocking DA (1x8)

Accessories	***exponent***
+5PS	Redundant power supply option for 500FR

Enclosures	***exponent***
500FR	Compact High Density Distribution Frame
S501FR	Standalone enclosure