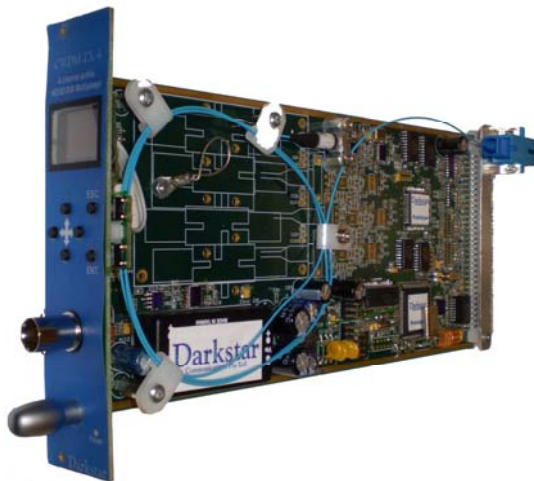


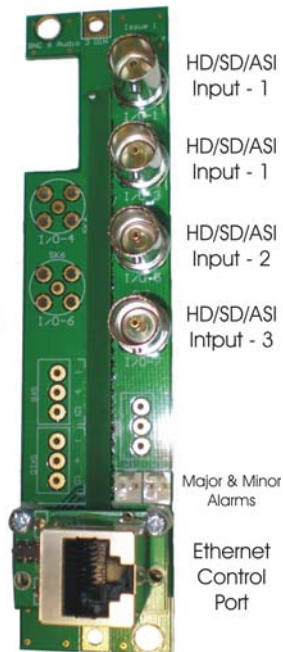
Digital Video Optical Transmitter



Preliminary Specifications

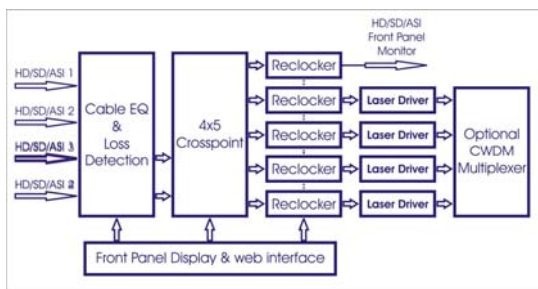


- Single channel version shown



NOTE - shown without Decal

- Multi-channel version shown



Features

- Supports HD/SDI & ASI signals
- Non-inverting outputs
- Available in 1,2 or 4 channel versions
- Configurable as non-reclocking or re-clocking (143,270,1438,1485 Mbps)
- Input routing or failure switching with 4x4 crosspoint (multichannel versions)
- Front panel BNC monitoring
- Graphical Front Panel
- Web based monitoring & control

Description

The Digital Video Transmitter supports the short haul transmission of SD, HD & ASI formats over single mode fiber optic cable. The module can support up to four independent optical transmitters operating on different wavelengths. The individual wavelengths are combined onto a single fiber using an onboard passive optical multiplexer. Each channel is entirely independent; therefore, each channel can be of different data rate or format. This multiplexing technique avoids the channel restriction and jitter issues associated with time division multiplexing (TDM) methods. A total aggregate data rate of 6Gbit/s is possible (4 x HD). Additionally, each channel could contain up to 4 SDI/ASI channels using HD encapsulation, thus providing a maximum of 16 channels of SDI/ASI over a single fiber. For multichannel implementations with greater redundancy, each module could be constructed with a single transmitter and optically combined using an external passive multiplexer. The front panel or web control allows control over input to output routing, behavior upon input loss and the enabling of reclocking functions. The Digital Video Transmitter is especially suited to mixed datarate environments or installations that may change in the future.

Specifications

Electrical Inputs

Number of Inputs	Up to 4
Data Rate	143, 270 1483 & 1485 Mbps
Re-clocking	selectable (ON or OFF)
Return Loss	>15dB (5MHz – 1.5GHz)
Cable Eq.	0 to 100m Belden 1694A (HD) 0 to 250m Belden 8281A (SD)
Impedance	75 ohm
Connectors	75 ohm BNC female

Optical Outputs

Number of Outputs	1
Fiber	Single Mode 9/125um
Laser Power	0dBm (DFB laser)
Connector	SC/PC (other types upon request)
Laser Wavelength	Single Channel 1310nm (other λ on request) Two Channels 1310/1550 nm (other λ on request) Four Channels 1510,1530, 1550, 1570 nm

Alarm & Control Interface

Graphical front panel display
Embedded Web server with 10/100 UTP Ethernet
RJ45 UTP on rear assembly
Major & minor alarm relay contacts (rear assembly)

Supported Standards

SMPT E - 259M (270Mbit/s), 292M (1483, 1485Mbit/s) 305M (SDTI) 310M
DVB-ASI - EN50083-9 (270Mbit/s)

Compatibility

Compatible with all SBC modules supporting digital video interfaces
Compatible with SBC 3RU, 84HP Eurocard frame
Compatibility with third party frames upon request.

Notes

This method can be scaled using external passive optical multiplexers and alternate laser wavelengths to provide up to 16 independent channels