SBC ProCom

RXDA 5000
Digital Video Optical Receiver

Features

- Supports HD/SDI & ASI signals
- Non-inverting & Inverting cable outputs
- Re-clocking (143,270,1438,1485 Mbps)
- Input routing or failure switching
- Front panel BNC monitoring (Single channel versions)
- Optional digital video analyser sub-module
- Optional Graphical Front Panel & Web based monitoring & control
- RXDA-5000 PIN receiver
- RXDA-5100 PIN + OLED front panel & web server
- RXDA-5200 PIN + OLED front panel & web server + analyser
- RXDA-5010 APD receiver
- RXDA-5110 APD + OLED front panel & web server
- RXDA-5210 APD + OLED front panel & web server + analyser

Description

The Digital Video Receiver is the complement of the Digital Video Transmitter series. This receiver supports the short haul transmission of SD, HD & ASI formats over single mode fiber optic cable. The module also contains a cable input which can be selected upon optical input loss. Two modules can be cross coupled to form an automatic crossover upon failure. Alternatively, a test pattern generator or logo generator could be switched over upon optical loss.

For multichannel implementations with greater redundancy, each transmitter could be constructed using different wavelength lasers and optically combined using an external passive multiplexer. The incoming fibre link would be split using a passive optical demultiplexer with each wavelength connected to an optical receiver.
The Digital Video Receiver is especially suited to mixed datarate environments or installations that may change in the future.

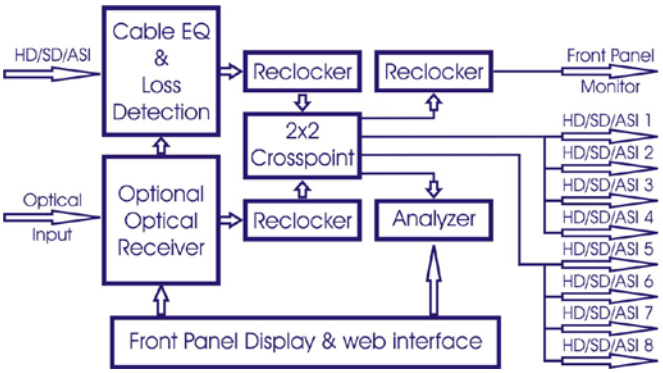
Specifications

Electrical Inputs

Data Rate	143, 270 1483 & 1485 Mbps (re-clocked)
Return Loss	>15dB (5MHz – 1.5GHz)
Cable Eq.	0 to 120m Belden 1694A (HD) 0 to 250m Belden 8281A (SD)
Impedance	75 ohm
Connectors	BNC female

Optical Inputs

Number of Inputs	1
Fiber	Single Mode 9/125um
Sensitivity	-20dBm typical (PIN version) -30dBm typical (APD version)
Connector	SC/PC (other types upon request)
APD Wavelength	1200-1600nm



Electrical Outputs

Number of Outputs	8 (complementary) + front panel (non-inverting)
Data Rate	143, 270, 1483 & 1485 Mbps (re-clocked)
Return Loss	>15dB (5MHz – 1.5GHz)
Cable Slew Rate.	Automatic
Impedance	75 ohm
Connectors	BNC female

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

SMPTE - 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 de-multiplexers and alternate laser wavelengths to provide up to 16 independent channels.

Compliances

CE; UL; C-Tick
RoHS Compliant Directive 2002/95/EC

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Ordering Information

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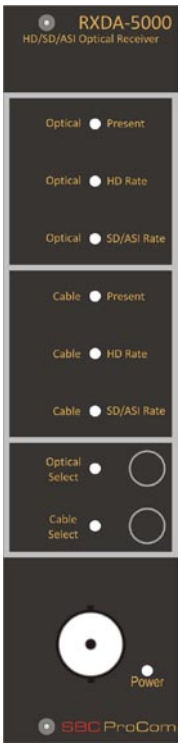
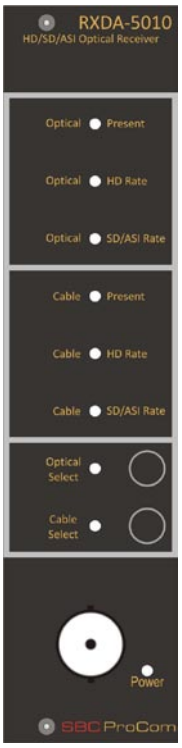
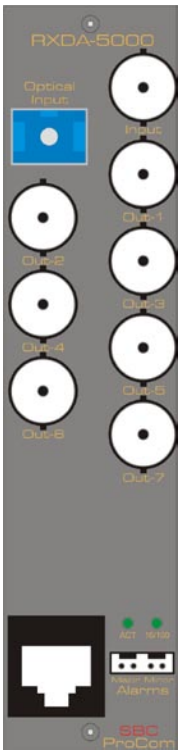


Front



Front

Front

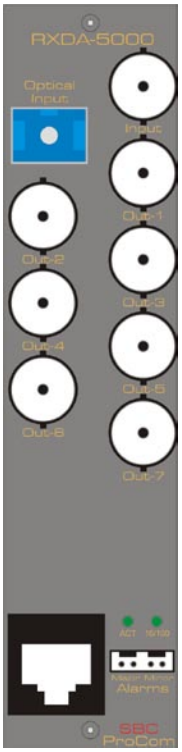


Common Rear

Front

Front

Front



Common Rear

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