

# XFM50-DVDA-F2X1N

## 3G SDI dual Channel Distribution Amplifier with Fiber

### Description

XFM50-DVDA-F2X1N is a digital distribution amplifier module for all SDI video signals up to 3Gbit/s with dual inputs and up to 8 outputs per input, depending on selected I/O panel. XFM50-DVDA-F2X1N is also configurable as a single channel distribution amplifier module with up to 16 outputs.

A maximum of four Fiber connections are available through SFP modules, configurable as four outputs or up to two inputs.

### Supported Signals

The XFM50-DVDA-F2X1N module supports the following signals:

- SD SDI
- HD SDI
- 3G HD SDI
- Fiber (depending on SFP selected module)

### Processing and Control

Cable equalization compensates for up to 350m of cable length (depending on used SDI format).

Format detection and monitoring of input signal is supported.

The module fully integrates into SNMP and ICONN environment.

### Output Setup

Four different I/O Panel are available for XFM50-DVDA-F2X1N module:

- XFM50-DVDA-F2X1N-S with Standard BNC and SFP
- XFM50-DVDA-F2X1N-SB with Standard BNC, SFP and bypass outputs
- XFM50-DVDA-F2X1N-H with HD-BNC<sup>1</sup> and SFP
- XFM50-DVDA-F2X1N-HB with HD-BNC<sup>1</sup>, SFP and bypass outputs

### Failover Switch

A XFM50-DVDA-F2X1N module supports to be setup as a failover switch. If the selected input signal fails, it automatically selects the other input as source.

Also the optional Test Signal Generator can be used as failover source.

### Test signal generator (optional)

An internal test signal generator with standard patterns like Color Bars is available as option. This eases wire tests, especially in complex infrastructures.

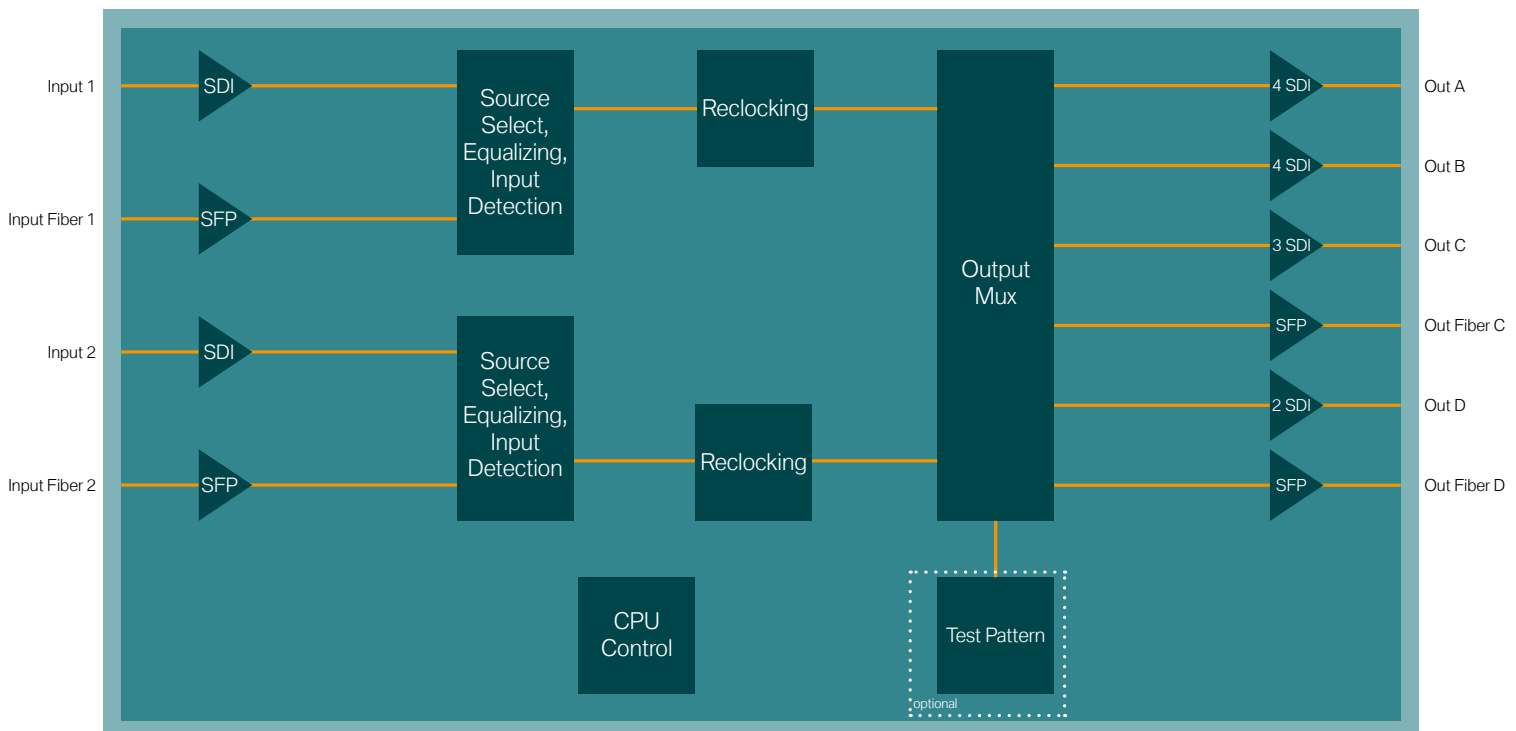
### I/O Configuration

Outputs are organized in groups (see block diagram). Each group is assigned to an input or the internal test signal generator. Fiber / SFP ports are configurable as input or output ports.

XFM50-DVDA-F2X1N provides two inputs via SFP.

All modules are configured via CDesk remote control software, local or LAN panel. The configuration is stored on the modules for standalone operation.

## Functional Blockdiagram



<sup>1</sup> HD-BNC connectors such as Amphenol part No. 034-1017-300

## SDI - Input

### No. of Inputs

with XFM50-DVDA-F1X1N-S	2 BNC 2 Fiber (SFP)
with XFM50-DVDA-F1X1N-SB	2 BNC 2 Fiber (SFP)
with XFM50-DVDA-F1X1N-H	2 HD-BNC 2 Fiber (SFP)
with XFM50-DVDA-F1X1N-HB	2 HD-BNC 2 Fiber (SFP)

**Signal Type** SMPTE 259M, 292M, 424M  
270 MHz SDI,  
1.485 GHz SDI,  
2.97 GHz SDI

**Signal Level** 800 mV

**Impedance** 75 Ohm

**Return loss** >15 dB at 1.485 GHz  
>10 dB at 2.97 GHz

**Equalizer** 120m cable length (SMPTE 424M)  
180m cable length (SMPTE 292M)  
350m cable length (SMPTE 259M)

**Format detection** available via SNMP / ICONN

### SFP

#### Compatible Modules

Port 1	Receiver, Dual Receiver, Transceiver, Transmitter, Dual Transmitter
Port 2	Transmitter, Dual Transmitter

### Settings

**Configuration memory** 8 global settings

## SDI - Output

### No. of Outputs

with XFM50-DVDA-F1X1N-S	8 BNC 4 Fiber (SFP)
with XFM50-DVDA-F1X1N-SB	8 BNC 4 Fiber (SFP) with 2 Bypass Outputs
with XFM50-DVDA-F1X1N-H	13 HD-BNC 4 Fiber (SFP)
with XFM50-DVDA-F1X1N-HB	13 HD-BNC 4 Fiber (SFP) with 2 Bypass Outputs

**Signal Type** SMPTE 259M, 292M, 424M  
270 MHz SDI,  
1.485 GHz SDI,  
2.97 GHz SDI

**Signal Level** 800 mV

**Impedance** 75 Ohm

**Return loss** >15 dB at 1.485 GHz  
>10 dB at 2.97 GHz

**Jitter** < 0.1 UI for SMPTE 259M  
< 0.15 UI for SMPTE 292M  
< 0.25 UI for SMPTE 424M

### GPI

**Connector** 8-pin Terminal Block

**No. of Inputs** 2

**No. of Outputs** 2

### Physical

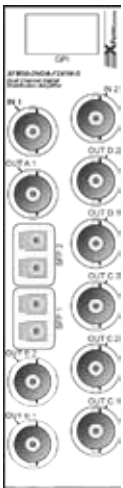
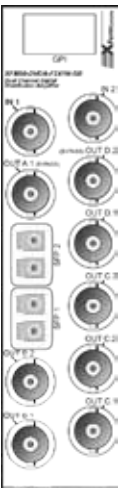
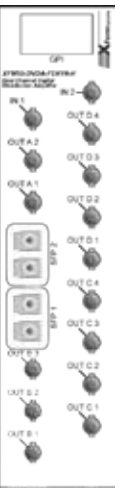
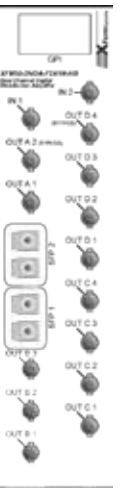
**Temperature** 0°C - 35°C (operation)

-20°C - 75°C (storage)

**Humidity** 10% - 90% non condensing

**Power Requirements** 3.5 Watts

## Available I/O Panels

Name	XFM50-DVDA-F2X1N-S	XFM50-DVDA-F2X1N-SB	XFM50-DVDA-F2X1N-H	XFM50-DVDA-F2X1N-HB
Layout				
Inputs	2 BNC, 2 Fiber (SFP)	2 BNC, 2 Fiber (SFP)	2 HD-BNC, 2 Fiber (SFP)	2 HD-BNC, 2 Fiber (SFP)
Total Outputs	8 BNC, 4 Fiber (SFP)	8 BNC, 4 Fiber (SFP)	13 HD-BNC, 4 Fiber (SFP)	13 HD-BNC, 4 Fiber (SFP)
Bypass Outputs	no	2 BNC	no	2 HD-BNC

