

# XFM50-DVDA-C1X1N

## 3G SDI Single Channel Distribution Amplifier

### Description

XFM50-DVDA-C1X1N is a digital distribution amplifier module for all SDI video signals up to 3GBit/s with one input and up to 16 outputs, depending on selected I/O panel.

### Supported Signals

The XFM50-DVDA-C1X1N module supports the following signals:

- SD SDI
- HD SDI
- 3G HD SDI

### 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-C1X1N module:

- XFM50-DVDA-C1X1N-S with Standard BNC
- XFM50-DVDA-C1X1N-SB with Standard BNC and bypass output
- XFM50-DVDA-C1X1N-H with HD-BNC<sup>1</sup>
- XFM50-DVDA-C1X1N-HB with HD-BNC<sup>1</sup> and bypass output

### Test signal generator (optional)

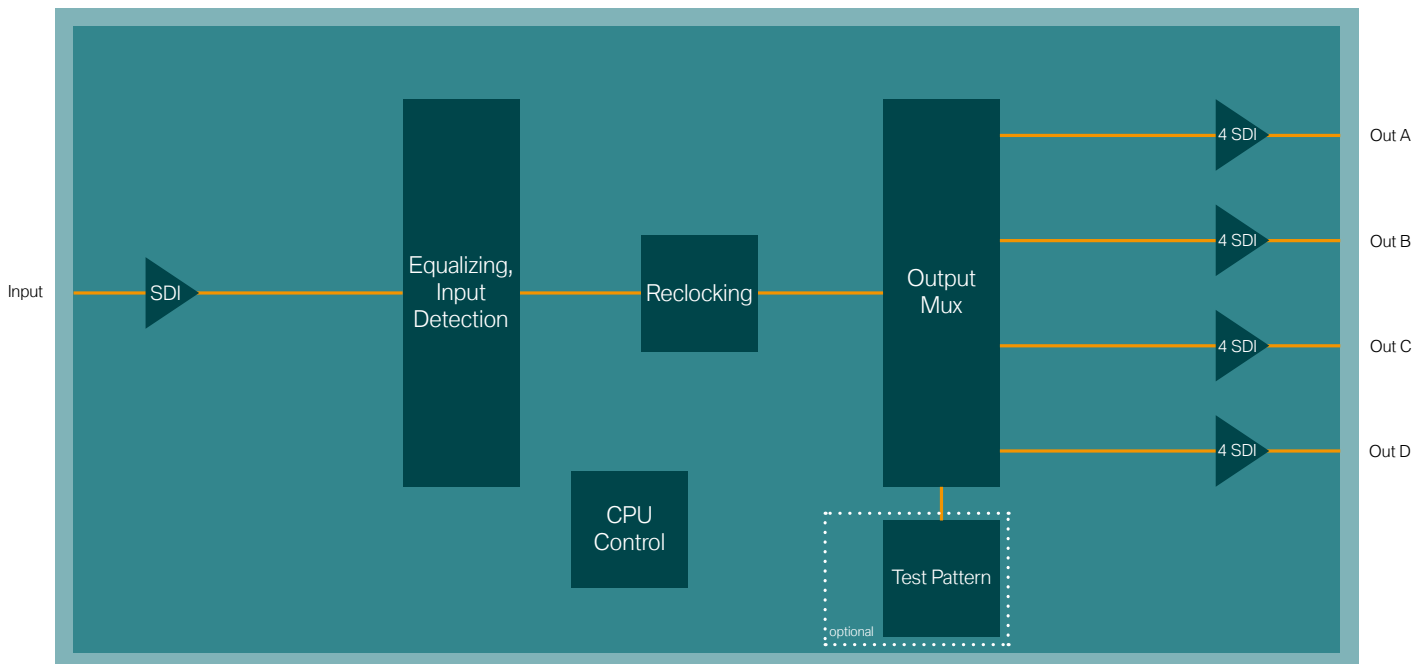
An internal test signal generator with standard patterns like Color Bars is available as option. This eases wire tests, especially in complex infrastructures.

### I/O Configuration

Outputs are organized in groups (see block diagram). Each group is assigned to the input or the optional test signal generator.

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-C1X1N-S	1 BNC
with XFM50-DVDA-C1X1N-SB	1 BNC
with XFM50-DVDA-C1X1N-H	1 HD-BNC
with XFM50-DVDA-C1X1N-HB	1 HD-BNC

**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

## GPI

**Connector** 8-pin Terminal Block

**No. of Inputs** 2

**No. of Outputs** 2

## Settings

**Configuration memory** 8 global settings

## SDI - Output

### No. of Outputs

with XFM50-DVDA-C1X1N-S	10 BNC
with XFM50-DVDA-C1X1N-SB	10 BNC
	with 1 Bypass Output
with XFM50-DVDA-C1X1N-H	16 HD-BNC
with XFM50-DVDA-C1X1N-HB	16 HD-BNC
	with 1 Bypass Output

**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

## Physical

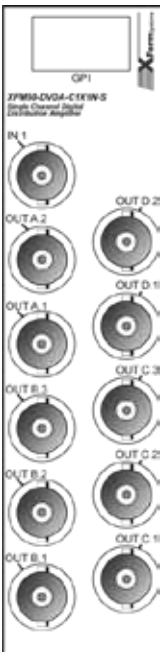
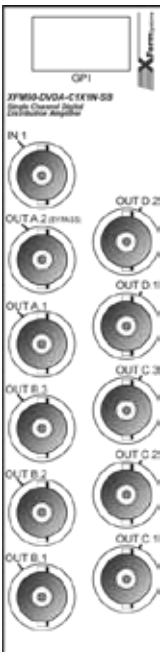
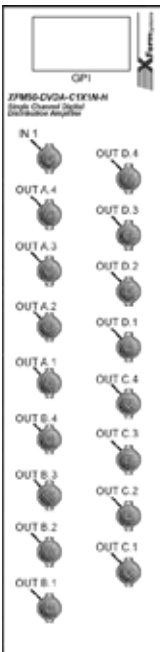
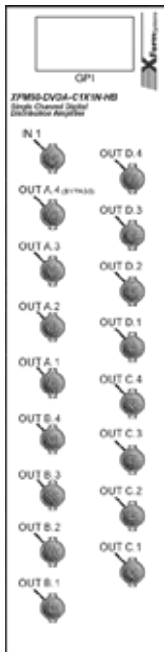
**Temperature** 0°C - 35°C (operation)

-20°C - 75°C (storage)

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

**Power Requirements** 3.5 Watts

## Available I/O Panels

Name	XFM50-DVDA-C1X1N-S	XFM50-DVDA-C1X1N-SB	XFM50-DVDA-C1X1N-H	XFM50-DVDA-C1X1N-HB
Layout				
Inputs	1 BNC	1 BNC	1 HD-BNC	1 HD-BNC
Total Outputs	10 BNC	10 BNC	16 HD-BNC	16 HD-BNC
Bypass Outputs	no	1 BNC	no	1 HD-BNC

