# Series | 5000

## Terminal Equipment

LYNXTechnik AG® | Broadcast Television Equipment

Series 5000 Catalog 2024/4

Series 5000 Rev 2.8

# Series | 5000®

The Series | 5000 hardware is unique in terms of features, reliability, and dependability. Series | 5000 is a tried and tested solution for mission critical applications where dependability and quality counts, trusted by broadcasters worldwide for over 13 years.

We provide a broad spectrum of modules spanning all applications, from simple analog video and audio solutions to multiplexed fiber transport systems capable of moving over 54Gbit of real time bi-directional video data over a single fiber link.

All of the LYNX Technik products are designed and manufactured in Germany to the highest quality standards. Through extensive use of programmable FPGA technology, modules can be easily upgraded with the latest new features, future proofing your investment.

Our rack frames are solid, high quality, and use only the highest rated materials. We use non-magnetic stainless steel construction for strength and full safety and emissions compliance.



3

# Table of Content



## Product Compatibility

To help locate specific products quickly, both the product locator table and the module listings are coded to provide a quick reference to video format and fiber compatibility. Icons are found at the top of each module page.

| Compatibility Key | |
|---|---|
| SDTV | Analog and SDI Video 270Mbit - SDTV |
| HDTV | HDTV Analog Component Video and Sync |
| 1.5G | HD-SDI Video 1.5 Gbit |
| 3G | HD-SDI Video 3 Gbit |
| 12G | UHD-SDI Video 12G-SDI |
| Fiber | Fiber Optic I/O |

# RACK FRAMES

RFR 5018

## 2 RU Rack Frame for Series 5000 (Fan Cooled)

### Features

Compact 19 inch 2 RU rack mount rack frame which can accommodate up to 10 modules, primary and redundant power supplies plus the optional LynxCentraal rack controller. Fan cooling is provided through the front cover. The high quality stainless steel construction is fully EMC/FCC compliant. All racks are pre-wired for the LynxCentraal control system.

Note: This version is recommended when multiple higher power signal processing modules are used. This is the standard choice for most system installations.

### Ordering Information

| Model # | Description |
|---|---|
| RFR 5018 | 19" Rack Frame with Primary Power Supply (fan cooled) |
| RPS 5018 | Option : Redundant Power Supply |

RFR 5014

## 2 RU Rack Frame for Series 5000 (No Fan Cooling)

### Features

Compact 19 inch 2 RU rack mount rack frame which can accommodate up to 10 low power* modules, primary and redundant power supplies plus optional LynxCentraal rack controller. This rack is convection cooled (no fans). The high quality stainless steel construction is fully EMC/FCC compliant. All racks are pre-wired for the LynxCentraal control system.

Note: This version is recommended when multiple low power modules are used, e.g. Distribution Amplifiers. Not recommended for high power signal processing modules.

### Ordering Information

| Model # | Description |
|---|---|
| RFR 5014 | 19" Rack Frame with Primary Power Supply (no cooling) |
| RPS 1018 | Option : Redundant Power Supply |

RPS 5018
Redundant Power Supply (primary supply included)

# RACK FRAMES

RFR 5013

## 2 RU Rack Frame for Passive Fiber Modules (No Power)

### Features

Compact 19 inch 2 RU rack mount rack frame which can accommodate up to 12 passive fiber optical modules (OCM and OSP modules). This is a passive rack frame and rack requires no power. The OCM and OSP Optical modules mount from the rear of the rack.

### Ordering Information

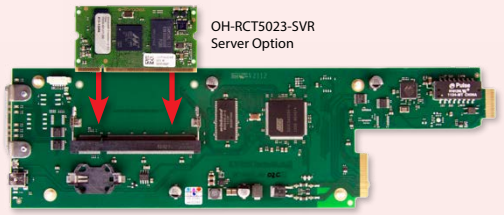
| Model # | Description |
|---|---|
| R FR 5013 | 19" Rack Frame for Passive Optical Modules |

# CONTROL SYSTEM

RCT 5023

## LynxCentraal Network Rack Controller + Server Option

The RCT 5023 LynxCentraal Rack Controller is designed for use with the RFR 5018 and RFR 5014 rack frames. The basic controller module provides network (LAN) access to the rack frame via the LynxCentraal control system hosted in a PC. With the addition of the plug in server option OH-RCT5023-SVR, the LynxCentraal software is hosted on the controller and supports network attached LynxCentraal clients. Multiple server options can be used in a system for redundant backup.



OH-RCT5023-SVR
Server Option

### Features

- Remote control and status monitoring for all installed modules
- Network (LAN) access
- RFR 5018 and RFR 5014 compatible
- USB port on module for local access
- Upgrade with server option
- Includes LynxCentraal software
- Hot swappable

### Ordering Information

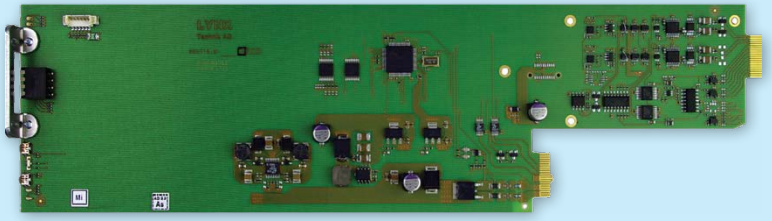
| Model # | Description |
|---|---|
| RCT 5023 G | LynxCentraal Network Rack Controller |
| OH-RCT5023-SVR | Plug-In Server Option |

SDTV HDTV

# ANALOG VIDEO DISTRIBUTION

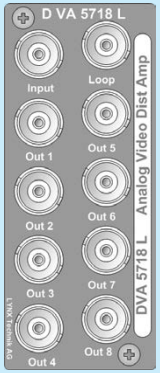
DVA 5718 L

## SD/HD 1>8 Analog Video / Sync Distribution Amplifier



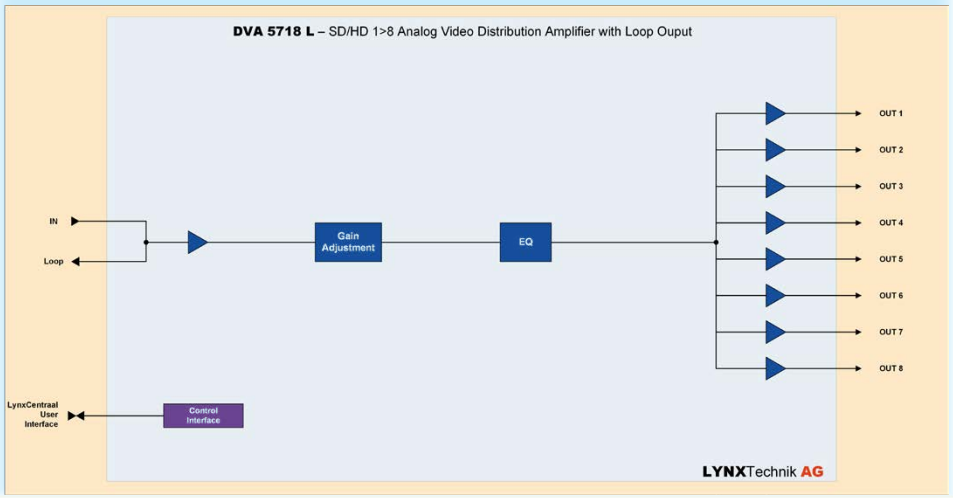
### Features

- High quality 1>8 video distribution
- Wide band amplifier for both SD and HD analog video
- Also use as sync DA, for tri-level and Bi-level sync
- Passive loop through input
- Signal presence detection
- Adjustable video gain
- Adjustable Cable equalization
- Selectable input clamp. (via control system)
- Selectable AC or DC coupled inputs (via control system)
- Microprocessor controlled with internal flash ram for storing configuration.
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVA 5718 L | SD/HD 1>8 Analog Video / Sync Distribution Amplifier |

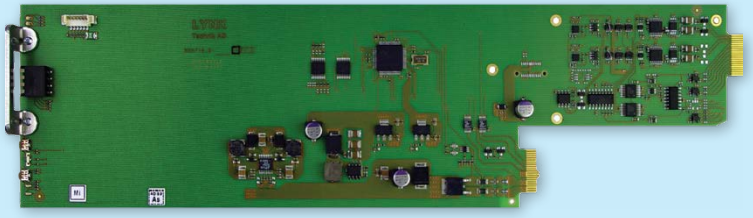



SDTV HDTV

# ANALOG VIDEO DISTRIBUTION

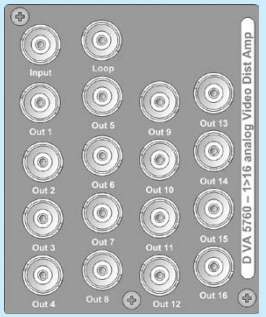
DVA 5760 L

## SD/HD 1>16 Analog Video / Sync Distribution Amplifier



### Features

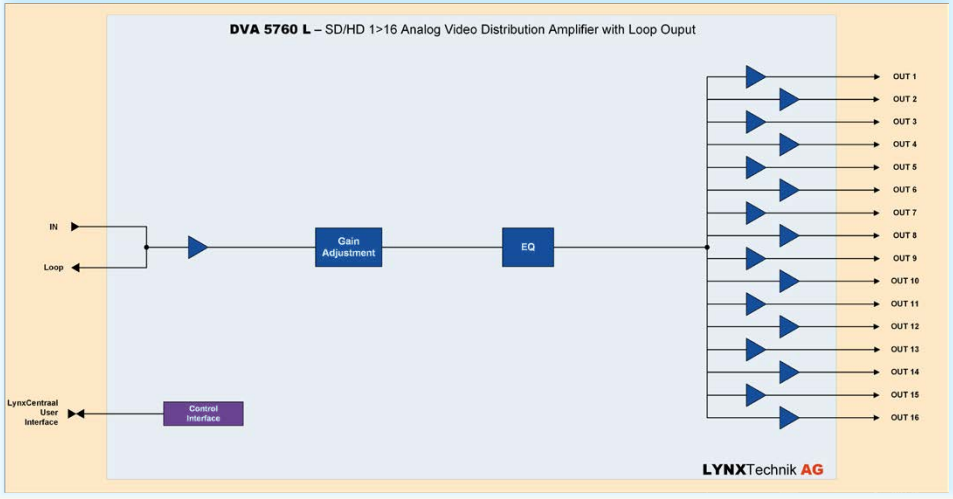
- High quality 1>16 distribution amplifier
- 30MHz wide band distribution amplifier for both SD and HD analog video
- Supports SD bi-level and HD tri-level analog sync
- Passive input loop through
- Signal presence detection
- Adjustable video gain
- Adjustable cable equalization
- Selectable input clamp (via control system)
- Selectable AC or DC coupled differential inputs (via control system)
- Microprocessor controlled with internal flash ram for storing settings
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVA 5760 L | SD/HD 1>16 Analog Video / Sync Distribution Amplifier |

Note: This module has a dual width panel and will occupy two rack card slots.

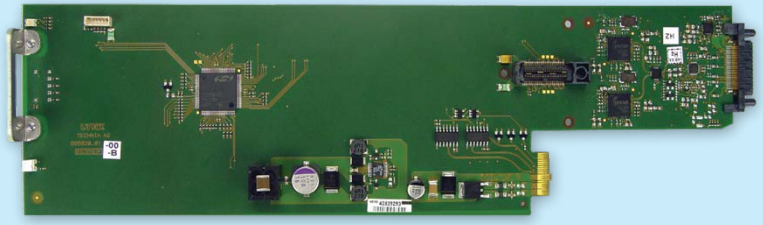


SDTV HD 1.5G HD 3G

# DIGITAL VIDEO DISTRIBUTION

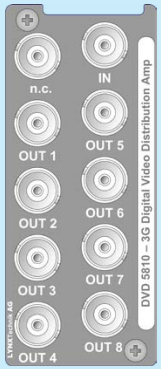
DVD 5810

## 3G/HD/SD - SDI / ASI Distribution Amplifier



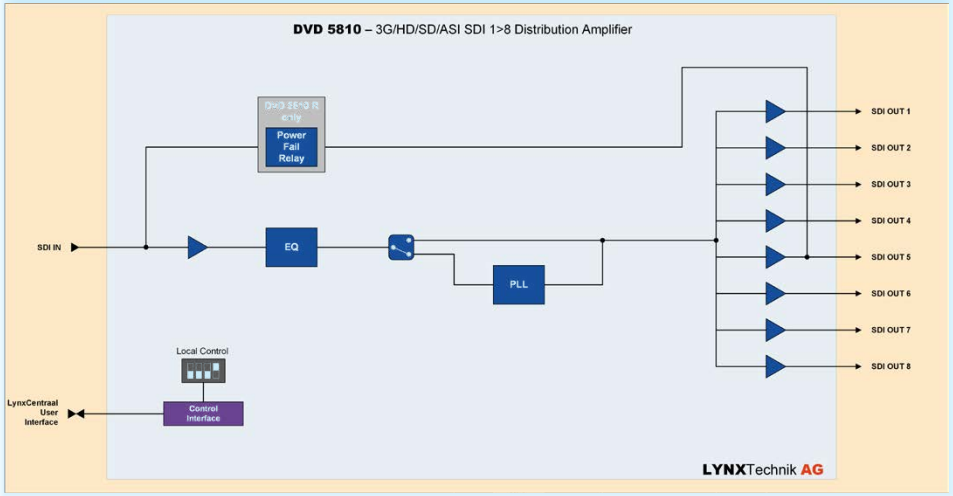
### Features

- Supports all SDI/ASI/DVB video formats
- Fixed 1>8 configuration
- Reclocking or non-reclocking mode (selectable)
- Auto-detect input video standard
- Transparently pass data between 15Mbit/s and 3G-SDI in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication
- Optional power fail relay connecting input to output
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVD 5810 | 3G/HD/SD - SDI/ASI Distribution Amplifier |
| DVD 5810 R | OPTION: OH-DVD-RL2 - Mechanical Bypass Relay Option |

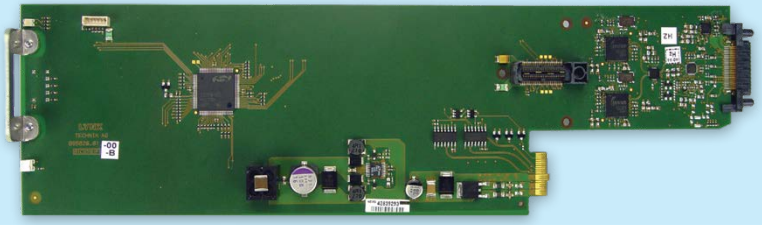



SDTV HD 1.5G HD 3G

# DIGITAL VIDEO DISTRIBUTION

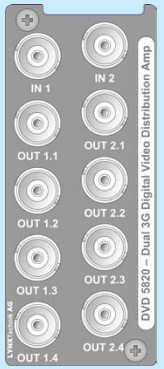
DVD 5820

## 3G/HD/SD - Dual SDI /ASI Distribution Amplifier



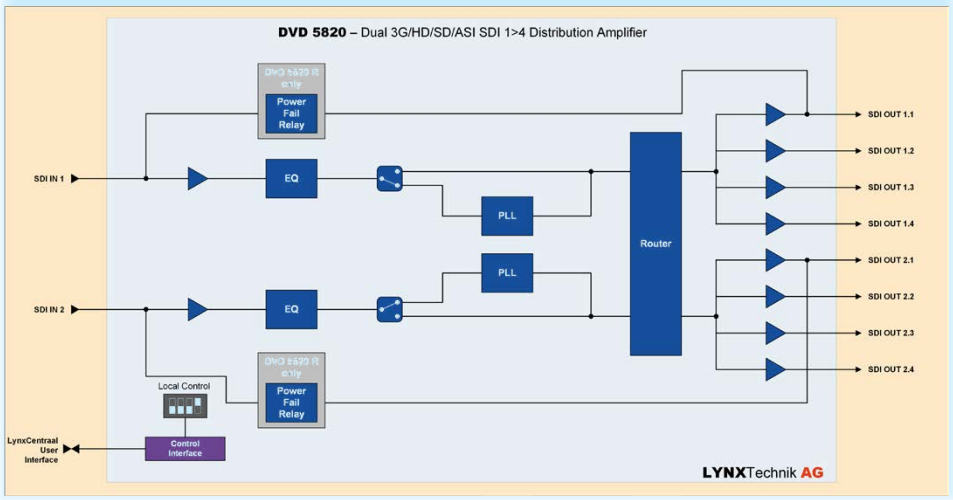
### Features

- Supports all SDI/ASI/DVB video formats
- Dual channel 1>4 or flexible 1>8 mapping
- Reclocking or non-reclocking mode (selectable)
- Auto-detect input video standard
- Transparently pass data between 15Mbit/s and 3G-SDI in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication
- Optional power fail relay connecting input to output
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVD 5820 | DVD 5820 3G/HD/SD - Dual SDI/ASI Distribution Amplifier |
| DVD 5820 R | OPTION: OH-DVD-RL2 - Mechanical Bypass Relay Option |

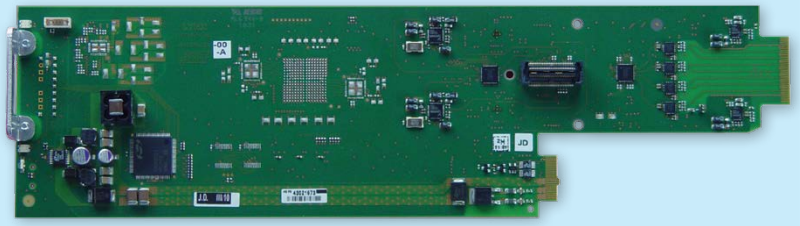


SDTV HD 1.5G HD 3G

# DIGITAL VIDEO DISTRIBUTION

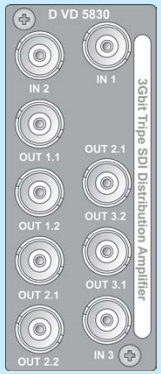
## DVD 5830

### 3G/HD/SD - Triple SDI Distribution Amplifier



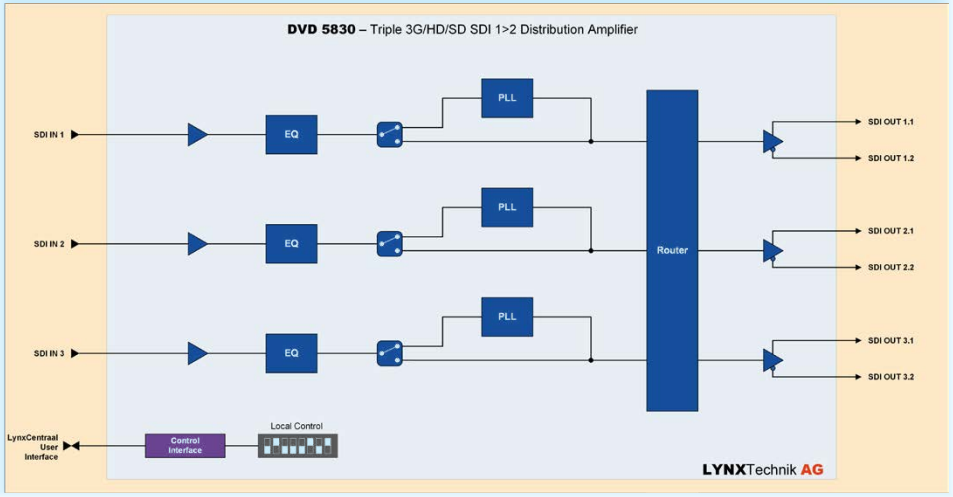
### Features

- Supports all SDI video formats
- 3 x SDI inputs and 3 sets of 2 outputs (user mapped)
- Reclocking or non-reclocking mode for each channel
- Auto-detect input video standard.
- Transparently pass data between 143 Mbit/s and 3G-SDI in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication for each input
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVD 5830 | 3G/HD/SD - Triple SDI Distribution Amplifier |



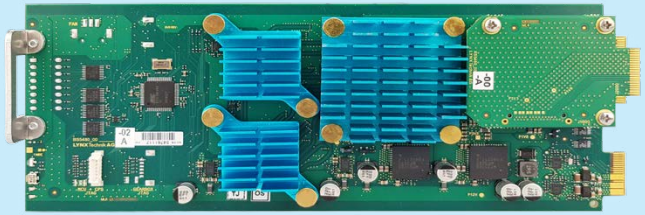

HD 1.5G HD 3G 4K/UHD

# DIGITAL VIDEO DISTRIBUTION

## DVD 5480 H

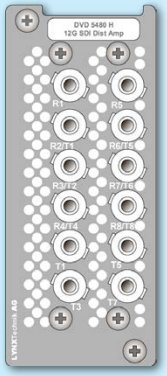
### 12G-SDI Distribution Amplifier

with 12G Single Link <> Quad Link (2SI) Conversion - High Density BNC connectors



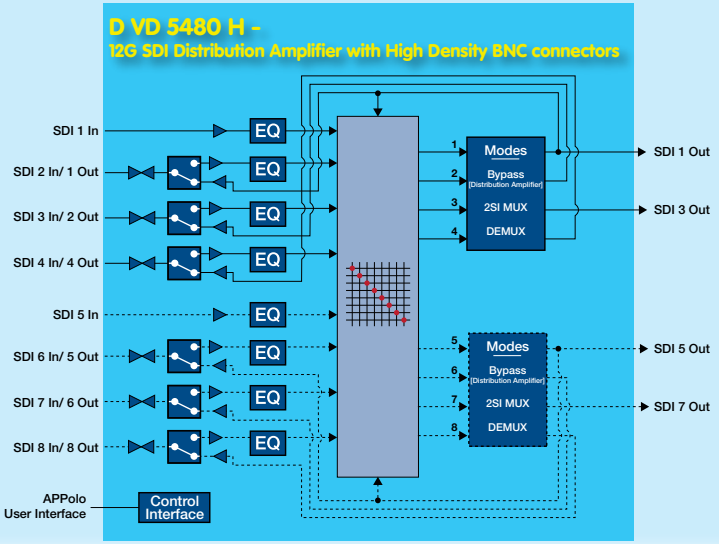
### Features

- Supports six bidirectional electrical inputs/outputs with additional two input and four output electrical interfaces.
- Several applications:
  - o Dual 12G-SDI single link input signal can be demultiplexed to quad link (2SI) independently
  - o Dual Quad link 3G-SDI (2SI) signals can be multiplexed to 12G-SDI Single link independently
  - o One 12G-SDI signal can be distributed to ten electrical outputs
  - o Mixtures between the different operation modes
- Incoming and outgoing 12G-SDI signals are reclocked.
- Input presence detection with LED indication
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control, status monitoring and error reporting when used with LYNX LynxCentraal Control System
- Hot swappable



### Ordering Information

| Model # | Description |
|---|---|
| DVD 5480 H | 12G-SDI Distribution Amplifier with 12G Single Link <> Quad Link (2SI) Conversion - High Density BNC connectors |



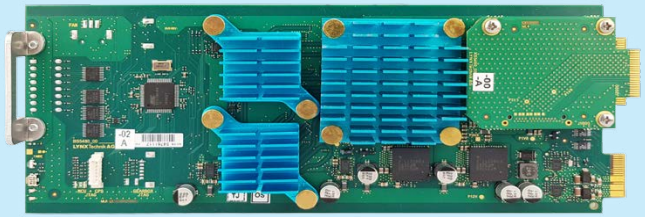
HD 1.5G HD 3G 4K/UHD

# DIGITAL VIDEO DISTRIBUTION

DVD 5480 TO

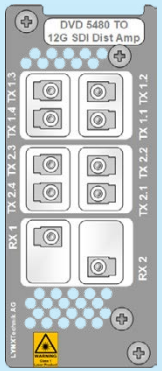
## Dual Channel 12G-SDI Distribution Amplifier

with Single Link to Quad Link (2SI) Conversion and Optical Interfaces



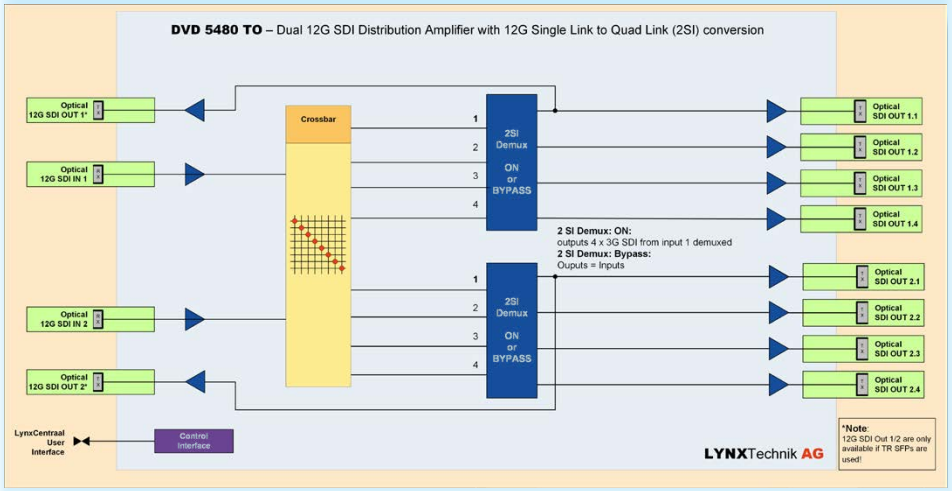
### Features

- Supports 12G-SDI on Optical inputs and outputs
- Auto-detect input video standard
- Dual Channel (2 x 1>4 ) or Single Channel (1>8) distribution amplifier
- 12G-SDI input signals can be demultiplexed to quad link (2SI, 4x3G-SDI)
- Input presence detection with LED indication
- Microprocessor controlled with internal flash ram for storing configuration
- Remote control, status monitoring and error reporting when used with Lynx LynxCentraal control system
- Hot Swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVD 5480 TO | Dual Channel 12G-SDI Distribution Amplifier with Single Link to Quad Link (2SI) Conversion And Optical Interfaces |



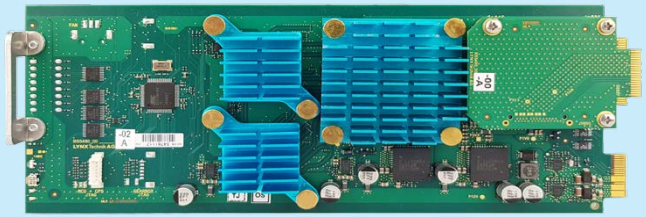

HD 1.5G HD 3G 4K/UHD

# DIGITAL VIDEO DISTRIBUTION

DVD 5480 HO

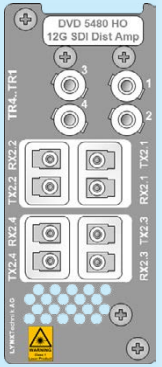
## 12G-SDI Distribution Amplifier

with 12G Single Link <> Quad Link (2SI) and Optical/Electrical Interfaces



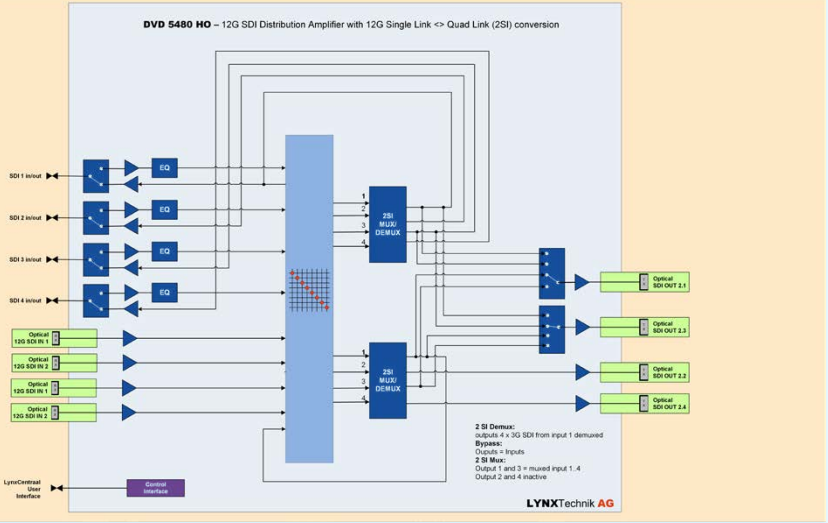
### Features

- Supports four 12G-SDI SDI Optical inputs and outputs each.
- Provides four bidirectional, electrical inputs/outputs on the high density MicroBNCs
- Different operation modes:
  - o 12G-SDI single Link Input signal can be demultiplexed to quad link (2SI; 4x3G-SDI)
  - o Quad Link (2SI) signal can be multiplexed to 12G-SDI Single Link
  - o 12G-SDI optical signal can be distributed to four optical outputs and four electrical outputs
  - o Mixtures between the different operation modes
- Input presence detection with LED indication
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control, status monitoring and error reporting when used with Lynx LynxCentraal Control system
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVD 5480 HO | 12G-SDI Distribution Amplifier with 12G Single Link <> Quad Link (2SI) and optical/ electrical Interfaces |



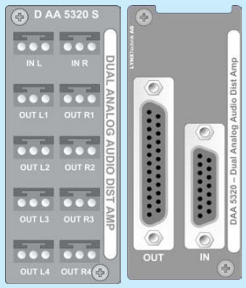
# ANALOG AUDIO DISTRIBUTION

DAA 5320

## Dual Analog Audio Distribution Amplifier


### Features

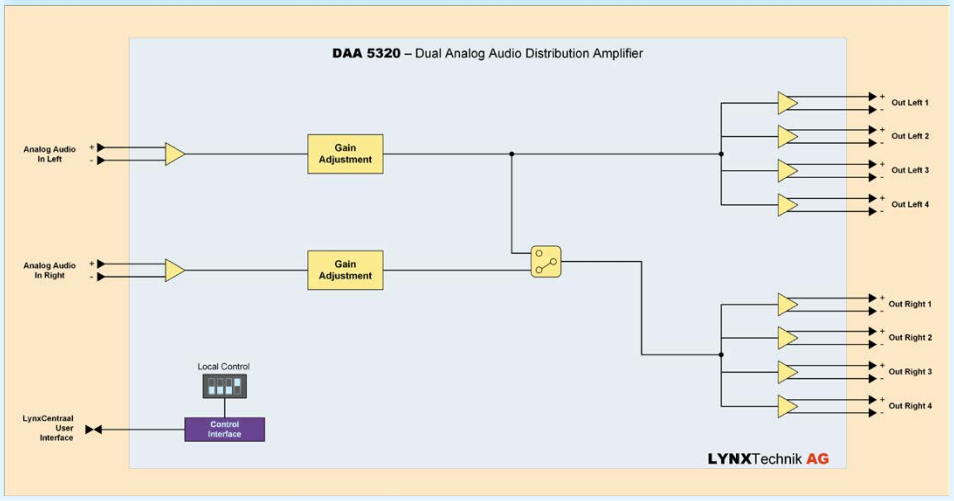
- Dual 1>4 (stereo) or single 1>8 (mono) modes
- Balanced analog audio inputs and outputs
- Input presence detection
- Independently adjustable gain for each input channel
- Two backplane options - screw terminal (Weco) or Sub D
- Microprocessor controlled with internal flash RAM for storing configurations
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




DAA 5320 S DAA 5320 D

### Ordering Information

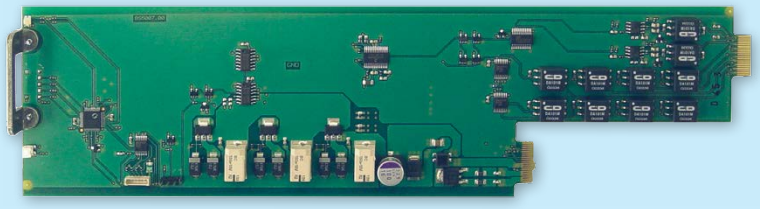
| Model # | Description |
|---|---|
| DAA 5320 D | Dual Analog Audio Distribution Amplifier (Sub D Connectors) |
| DAA 5320 S | Dual Analog Audio Distribution Amplifier (Weco Single Jack Connectors) |




# DIGITAL AUDIO DISTRIBUTION

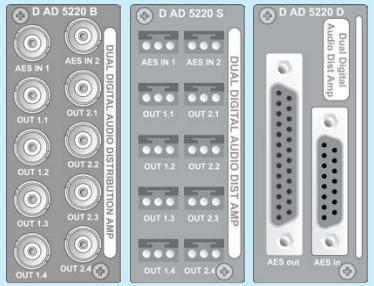
DAD 5220

## Dual AES Digital Audio Distribution Amplifier



### Features

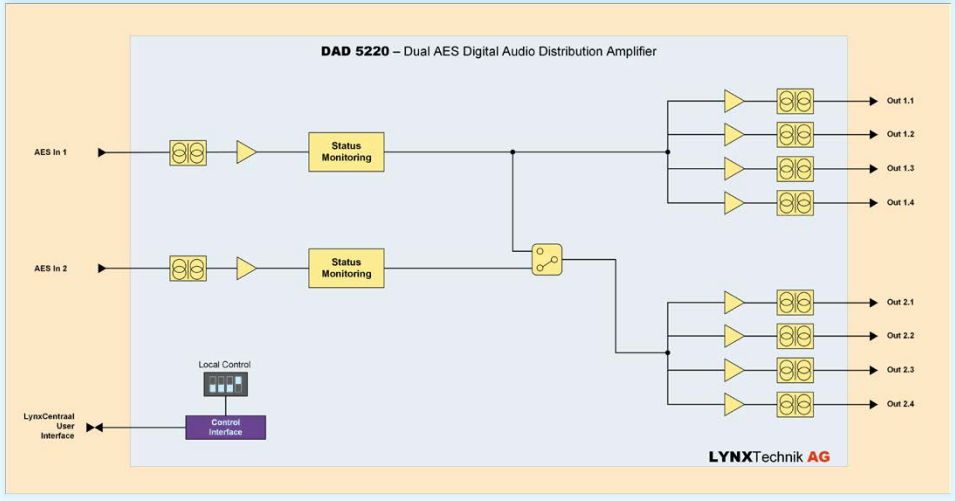
- Dual 1>4 or single 1>8 modes
- AES digital audio distribution amplifier
- Non-reclocking
- Signal presence detection
- Supports sample rates between 32KHz and 108KHz (Independent for each input channel)
- Fully isolated transformer coupled inputs and outputs.
- Three choices of back panel (balanced or unbalanced AES)
- Internal flash RAM for storing configurations
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




DAD 5220 B DAD 5220 S DAD 5220 D

### Ordering Information

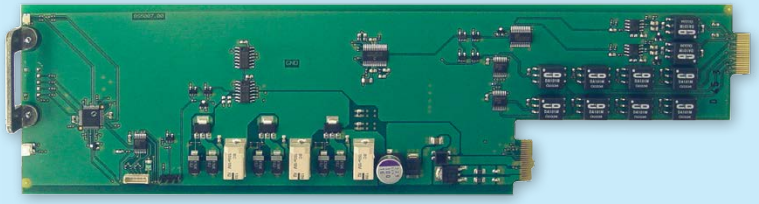
| Model # | Description |
|---|---|
| DAD 5220 B | Dual AES Audio Distribution Amplifier (BNC Connections for unbalanced AES3id) |
| DAD 5220 D | Dual AES Audio Distribution Amplifier (SubD Connections for balanced AES3) |
| DAD 5220 S | Dual AES Audio Distribution Amplifier (Weco Single Jack Connections for balanced AES3) |



# WORD CLOCK DISTRIBUTION

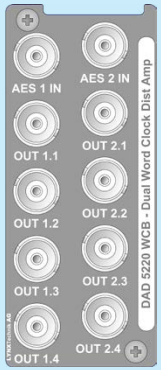
DAD 5220 WCB

## Dual Word Clock Distribution Amplifier



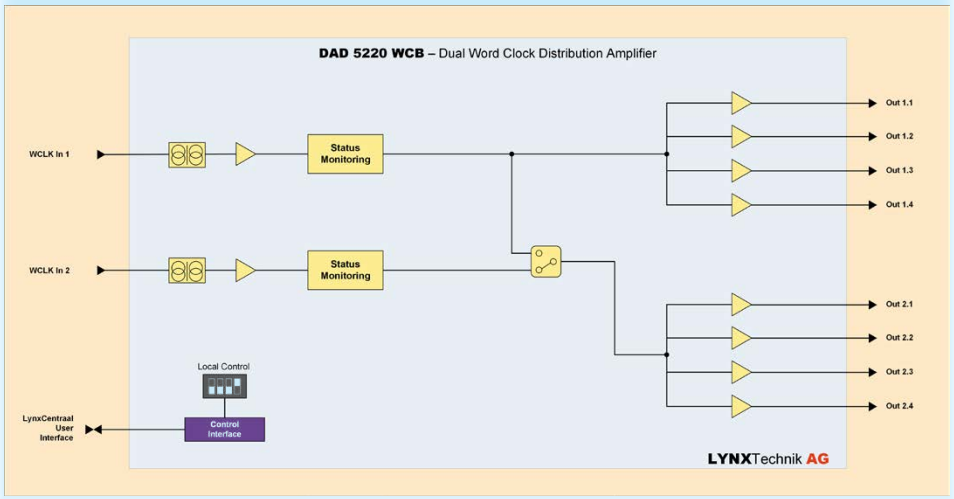
### Features

- Word Clock (48KHz) distribution amplifier
- Dual 1>4 or Single 1>8 modes
- Signal presence detection
- Supports clock signals between 32KHz and 108KHz (Independent for each input channel)
- 5v TTL level outputs
- Fully isolated transformer coupled inputs
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DAD 5220 | WCB Dual Word Clock Distribution Amplifier |

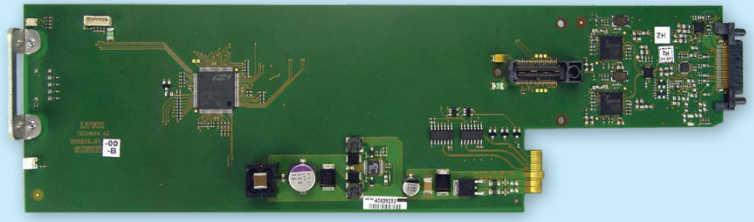



SDTV HD 1.5G HD 3G

# DIGITAL VIDEO SWITCHING

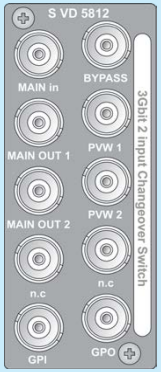
SVD 5812

## 3G/HD/SD - SDI/ASI 2 Channel Changeover Switch



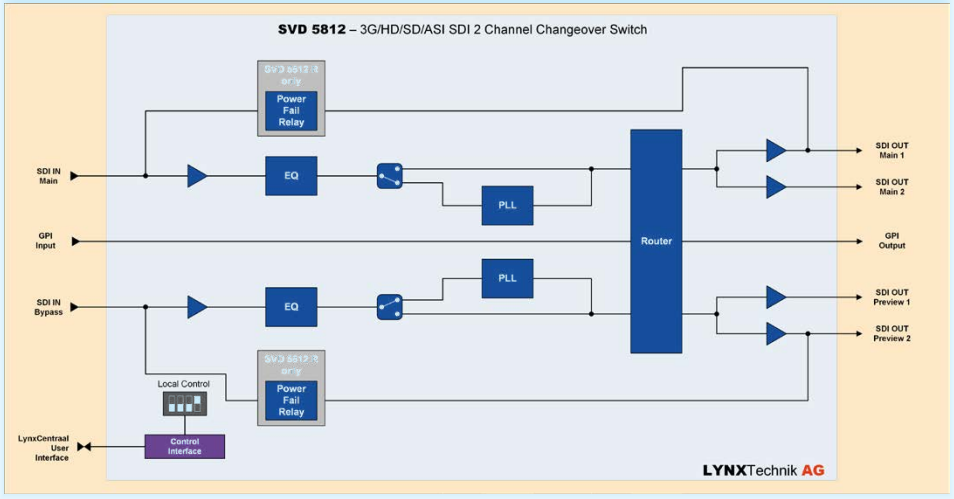
### Features

- Supports SDI/ASI/DVB inputs up to 3G-SDI
- 2 x Inputs and 2 sets of switched outputs
- Inputs can be reclocked or non-reclocked
- Auto-detect input video standard
- Manual switching from external GPI trigger or from control system GUI
- Automatic emergency switching when designated input fails
- Select latch or automatic return when main input returns
- GPO output trigger provided when switch operates
- Pass data between 15Mbit/s and 3G-SDI in non- reclocked mode.
- Input presence detection with LED indicators
- Optional power fail relay connecting inputs to outputs
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| SVD 5812 | 3G/HD/SD - SDI/ASI 2 Channel Changeover Switch |
| SVD 5812 R | OPTION: OH-DVD-RL2 - Mechanical Bypass Relay Option |

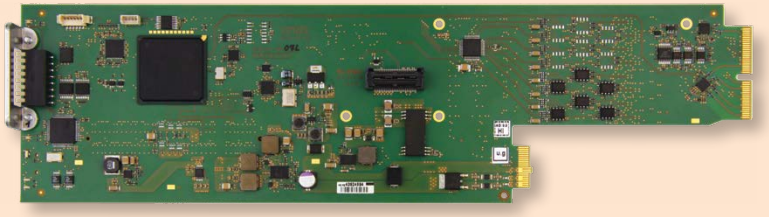


SDTV HD 1.5G HD 3G

# AUDIO EMBEDDING / DE-EMBEDDING

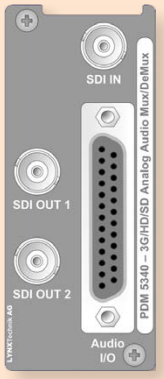
PDM 5340

## 3G/HD/SD - 4 Ch. Analog Audio Embedder / De-embedder



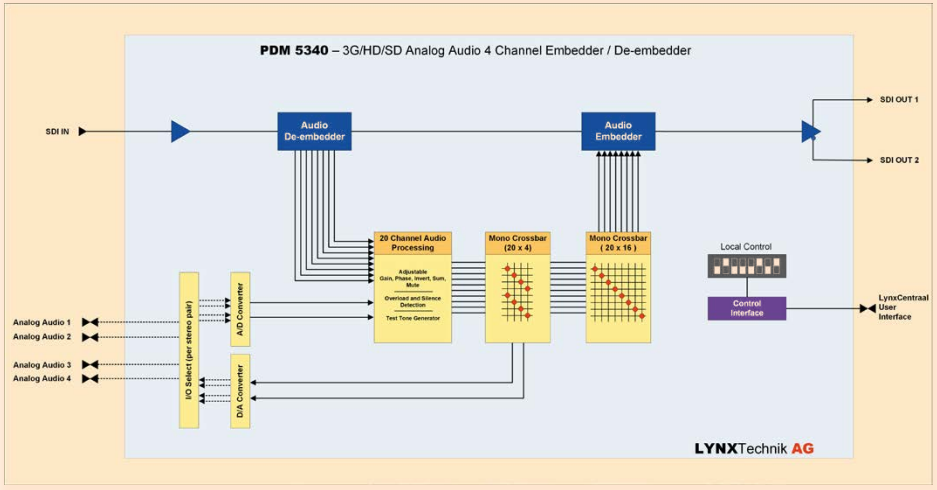
### Features

- Supports SDI formats up to 3Gbit (auto-detect)
- Switch between 4 channel analog audio embedder or de-embedder
- 20 channel audio processing stage with adjustable gain, phase invert, mute and stereo to mono mixdown. Also provides overload and silence detection
- 20 x 4 mono output crossbar for external audio channel assignment
- 20 x 16 mono crossbar for embedder audio assignments
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| PDM 5340 | 3G/HD/SD - 4 Channel Analog Audio Embedder / De-embedder |

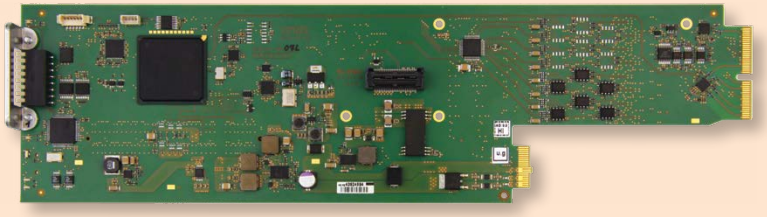



SDTV HD 1.5G HD 3G

# AUDIO EMBEDDING / DE-EMBEDDING

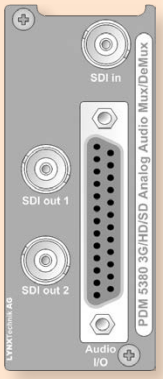
PDM 5380

## 3G/HD/SD - 8 Ch. Analog Audio Embedder / De-embedder



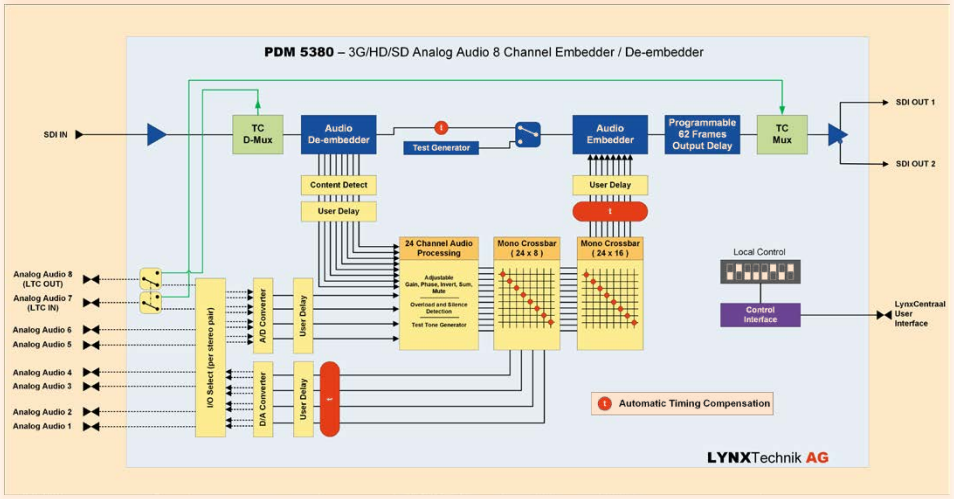
### Features

- Supports SDI formats up to 3Gbit (auto-detect)
- Switch between 8 channel analog audio embedder or de-embedder
- 24 channel audio processing stage with adjustable gain, phase invert, mute and stereo to mono mixdown. Also provides overload and silence detection.
- 24 x 24 mono output crossbar for embedder and external audio channel assignment.
- Selectable "Auto Pattern Function" with no input video - the module will embed audio in a selectable test pattern.
- Up to 62 frames of programmable delay.
- Up to 10 seconds of audio delay (total).
- Embed or de-embed Timecode using two of the audio inputs if needed.
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| PDM 5380 | 3G/HD/SD - 8 Channel Analog Audio Embedder / De-embedder |



SDTV HD 1.5G HD 3G

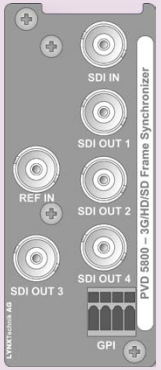
# FRAME SYNCHRONIZATION

PVD 5800

## 3G/HD/SD SDI Frame Synchronizer

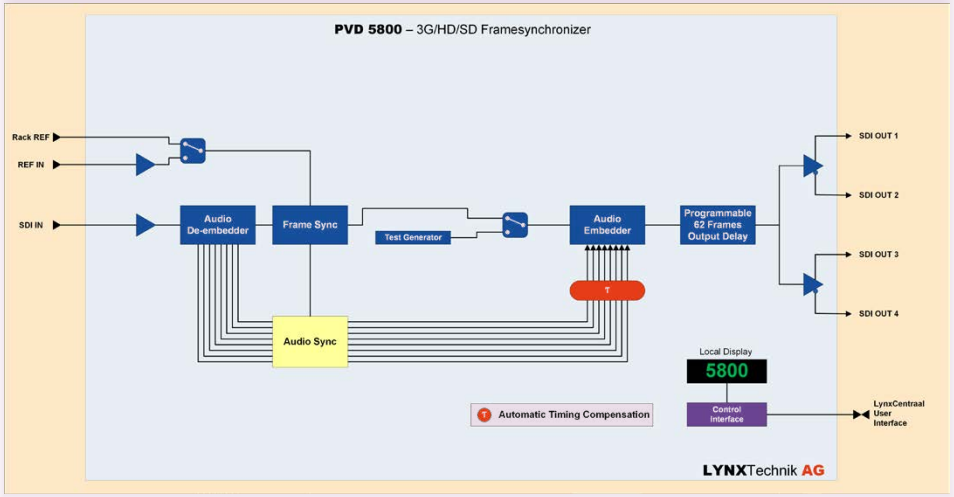
### Features

- Supports SDI formats up to 3Gbit (auto-detect)
- Robust "flywheel" synchronization for a wide variety of problematic sources
- "Cross lock" compatible reference input
- All 16 channels of audio de-embedded from SDI input, delayed to match video processing delay and re-embedded
- 4 x SDI outputs provided
- Integrated test pattern generator
- Auto-tracking audio delay with no "pops" or "clicks" in audio even when dropping and adding frames
- Up to 62 frames of programmable delay
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| PVD 5800 | 3G/HD/SD SDI Frame Synchronizer |

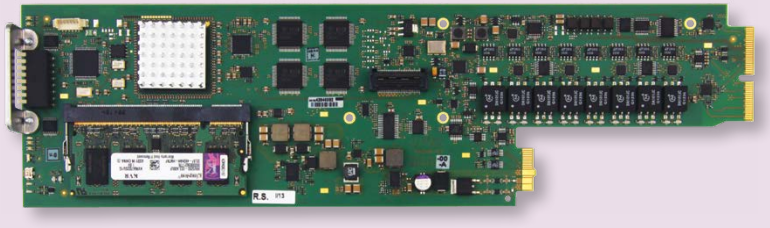



SDTV HD 1.5G HD 3G

# FRAME SYNCHRONIZATION

PVD 5802

## 3G/HD/SD Dual Input SDI Frame Synchronizer



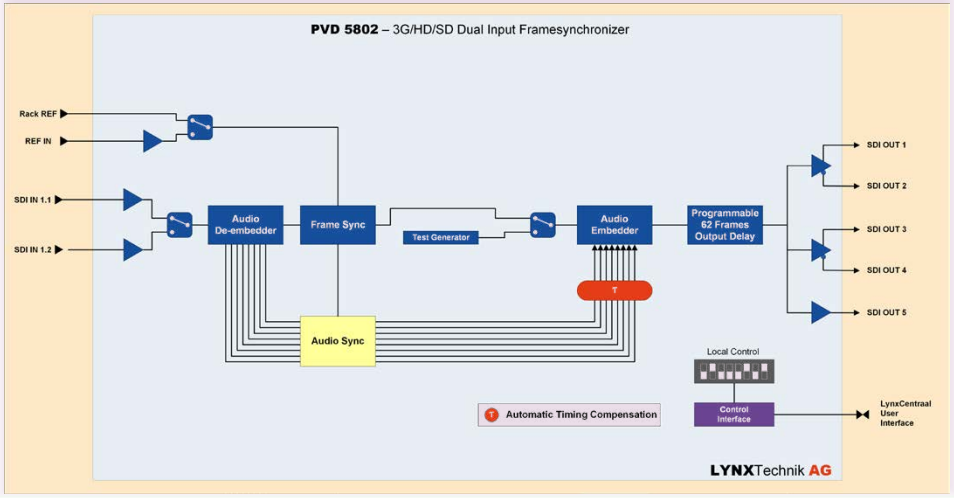
### Features

- Supports SDI formats up to 3Gbit (auto-detect)
- Two SDI inputs (switchable)
- Robust "flywheel" synchronization for a wide variety of problematic sources
- "Cross lock" compatible reference input
- All 16 channels of audio de-embedded from SDI input, delayed to match video processing delay and re-embedded
- 5 x SDI outputs provided
- Integrated test pattern generator
- Auto-tracking audio delay with no "pops" or "clicks" in audio even when dropping and adding frames
- Up to 62 frames of programmable delay
- 2 external GPI inputs, with choice of connector
- Remote control, status monitoring and error reporting possible with LYNX LynxCentraal control system
- Full SNMP support when used with LynxCentraal control system
- Hot swappable


PVD 5802

### Ordering Information

| Model # | Description |
|---|---|
| PVD 5802 | 3G/HD/SD SDI Frame Synchronizer (GPI on Terminal Strip) |

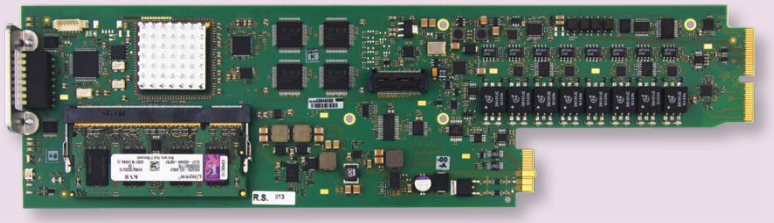


SDTV HD 1.5G HD 3G

# FRAME SYNCHRONIZATION

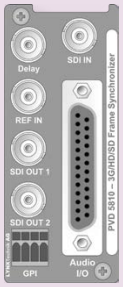
PVD 5810

## 3G/HD/SD SDI Frame Sync + Audio Processing



## Features

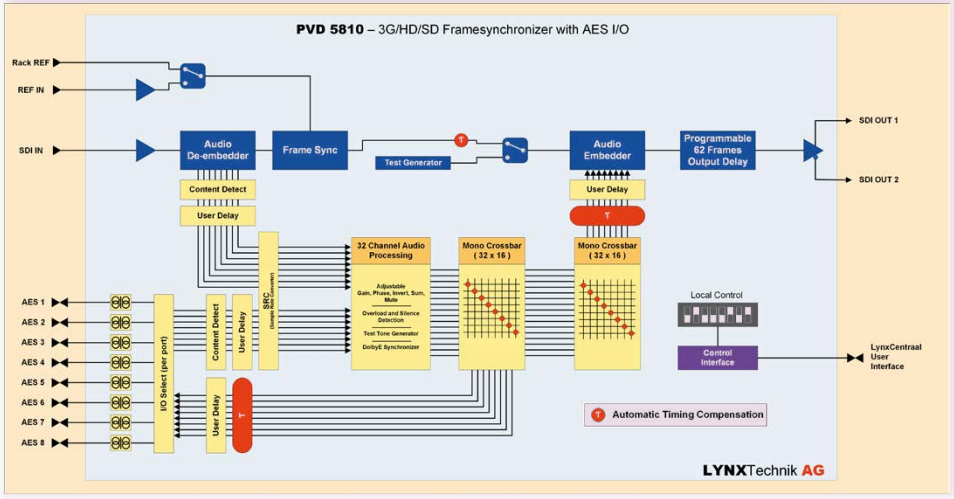
- Supports SDI formats up to 3Gbit (auto-detect)
- Robust "flywheel" synchronization for a wide variety of problematic sources
- "Cross lock" compatible reference input
- All 16 channels of audio de-embedded from SDI input
- 32 channel audio processing stage with adjustable gain, phase invert, mute and stereo to mono mixdown plus overload and silence detection
- 32 x 32 mono output crossbar for embedder and external audio channel assignment
- Integrated test pattern generator
- Auto-tracking audio delay with no "pops" or "clicks" in audio even when dropping and adding frames
- DolbyE Synchronizer to maintain guard band
- Up to 62 frames of programmable delay
- Two versions available for balanced and unbalanced AES
- All external audio inputs / outputs are transformer coupled
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




PVD 5810 D

## Ordering Information

| Model # | Description |
|---|---|
| PVD 5810 D | 3G/HD/SD SDI Frame Synchronizer + Audio Processing (balanced AES3 on SubD) |



# FIBER SOLUTIONS

## Fiber Implementation

A host of Series | 5000 modules provide fiber optic I/O capability. We use small, modular SFP sub-modules for fiber I/, so adding fiber capability or changing system configurations (wavelengths) is straightforward and simple.

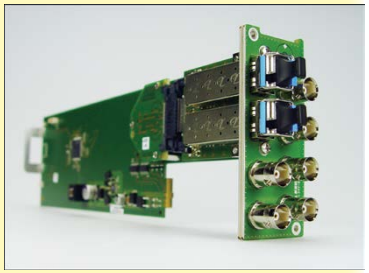
SFP Fiber Sub Module

With the introduction of HDTV, 1.5Gbit, 3G-SDI and now 12G-SDI bandwidth signals, the need to adopt fiber interfaces is a requirement. Fiber offers many benefits compared to copper interfaces, with the greatest advantage being distance with no degradation of signal quality.

Our SFP fiber sub-modules are tested to a high standard in reliability and heat compatibility. they range from basic non-CWDM fixed wavelength transmitters to a full range of CWDM transmitters with standardized 18 selectable wavelengths, as well as Single- and Multimode solutions, for SDI, MADI and Ethernet signals. The basic SFP modules support distances up to 10km, while our CWDM solutions support distances up to 40km or 80km. Please keep in mind that distances and Optical dampening have to be calculated for your individual setup.

## CWDM

LYNX Technik offers comprehensive support for CWDM (Coarse Wavelength Division Multiplexing) with 18 selectable laser wavelengths as specified by ITU-T G692.2. CWDM is a process used to optically multiplex signals into a single fiber link. By selecting different wavelength fiber transmitters and using the LYNX OCM passive optical multiplexers, it is easy to configure a bi-directional CWDM fiber transmission system. Our CWDM solutions service distances up to 40km, and our long-haul transmitters and receivers are suitable for applications up to 80km.



Module and Backplane with Integrated Fiber Connected

## Non-CWDM

CWDM Fiber modules use precision narrow-band lasers and therefore cost more. For simple applications that only require single point to point fiber connections, a "non-CWDM" or basic fiber SFP module is a more cost-effective solution.

## Passive Fiber System Components

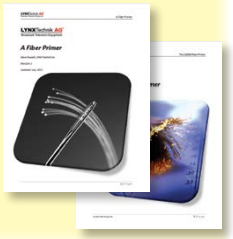
Working with light vs. electricity allows us to use passive optical building blocks for a fiber optic system design. Passive = no power requirements. Our solutions for fiber include optical CWDM multiplexers, splitters, and combiners. We adhere to the highest standards of superior technical performance and all of our passive fiber solutions are designed and manufactured in Germany.

## Additional Resources

Fiber optic transmission systems historically found application in installations to move video signals long distances, like to haul distant camera feeds into broadcast units. Signal distribution within a facility has been implemented with copper coaxial cable.

The transition to HD increaded video bandwidth requirement immensely. And with further migration to 12G-SDI video bandwidth has increased even further. But as bandwidth increases, the distance of copper to copper is shrinking rapidly.

Fiber connections meanwhile have upgraded their distance capabilites to up to 80km, offer the possibility to multiplex up to 16 incoming signals onto a single fiber link and demultiplex them at their location without loss of quality, and transmit not only SDI and Ethernet but also Serial ( i.e. RS 424) and GPI signals over massive distances - all while maintaining a slim cable size and amount.



Curious? We offer a **free**, **general introductory guide to Fiber and CWDM** installtions on our website via:

**https://www.lynx-technik.com/support/whitepapers/**

### Table A - Single Channel SDI Fiber Optic SFP Transmitters

| Basic Fiber | | Power |
|---|---|---|
| OH-TX-1-LC /SC /ST | Single Optical Transmitter (TX) SFP Module - 1310nm - (non CWDM) - LC /SC /ST connectors - 10km | -5dBm |
| OH-TX-0-850-MM | Single Optical Transmitter (TX) SFP Module - Multimode - 850nm - LC connectors - 300m | -7 ... -2dBm |
| **CWDM Fiber** Specify wavelength when ordering (ITU-T G694.2 wavelengths 1270 to 1610nm available) | | |
| OH-TX-4-XXXX-LC | Single Optical Transmitter (TX) SFP Module - CWDM capable - LC connectors - 40km | -1dBm |
| OH-TX-8-XXXX-LC | Single Optical Transmitter (TX) SFP Module - CWDM capable - LC connectors - 80km | +3dBm |

### Table B - Dual Channel SDI Fiber Optic SFP Transmitters

| Basic Fiber | | | | | Power |
|---|---|---|---|---|---|
| OH-TT-1-LC | Dual Optical Transmitter (TT) SFP Module - 2x1310nm - (non CWDM) Fiber LC connectors | | | | -5dBm |
| OH-TT-0-850-MM | Dual Optical Transmitter (TT) SFP Module - 2x850nm (Multimode) - Fiber LC connectors | | | | -5dBm |
| **CWDM Fiber** | | **Power** | **Available in transmitter pairs of:** | | |
| OH-TT-4-XXXX-XXXX-LC | Dual Optical Transmitter (TT) SFP Module - 40km CWDM - LC connectors | -1dBm | 1270nm / 1290nm | 1310nm / 1330nm | 1350nm / 1370nm |
| | | | 1390nm / 1410nm | 1430nm / 1450nm | 1470nm / 1490nm |
| OH-TT-8-XXXX-XXXX-LC | Dual Optical Transmitter (TT) SFP Module - 80km CWDM - LC connectors | +3dBm | 1510nm / 1530nm | 1550nm / 1570nm | 1590nm / 1610nm |
| | | | | | |

### Table C - Single Channel SDI Fiber Optic SFP Receivers

| Basic & CWDM Fiber | | Sensitivity |
|---|---|---|
| OH-RX-1-LC | Single Optical Receiver (RX) SFP Module - (1260 - 1620nm) - LC connectors | -18dBm |
| OH-RX-1-Y-SC | Single Optical Receiver (RX) SFP Module - (1260 - 1620nm) - SC connectors | -16dBm |
| OH-RX-1-Y-ST | Single Optical Receiver (RX) SFP Module - (1260 - 1620nm) - ST connectors | -16dBm |
| OH-RX-0-MM | Single Optical Receiver (RX) SFP Module - Multimode - 850nm - LC connectors | -15dBm |
| OH-RX-8-LC | Single Optical Receiver (RX) SFP Module - (1260 - 1620nm) - High Sensitivity - LC connectors | -26dBm |

### Table D - Dual Channel SDI Fiber Optic SFP Receivers

| Basic & CWDM Fiber | | Sensitivity |
|---|---|---|
| OH-RR-1-LC | Dual Optical Receiver (RX) SFP Module - (1260 - 1620nm) - Fiber LC connectors | -18dBm |
| OH-RR-8-LC | Dual Optical Receiver (RX) SFP Module - (1260 - 1620nm) - High Sensitivity - LC connectors | -26dBm |

### Table E - SDI Fiber Optic SFP Transceivers

| Basic Fiber | | Power | Sensitivity |
|---|---|---|---|
| OH-TR-1-LC | Optical Transceiver (TR) SFP Module - 1310nm (non CWDM) - LC conn. - 10km | -5dBm | -18dBm |
| OH-TR-0-850-MM | Optical Transceiver (TR) SFP Module - Multimode - 850nm - LC conn.- 300m | -5dBm | -15dBm |
| OH-TR-12G-LC | 12G-SDI Optical Transceiver (TR) SFP Module - Singlemode - 1310nm - LC connectors | -5 ... +2 dBm | -10dBm |
| **CWDM Fiber** Specify wavelength when ordering (ITU-T G694.2 wavelengths 1270 to 1610nm available) | | | |
| OH-TR-12G-XXXX-LC | 12G-SDI Optical Transceiver (TR) SFP Module - CWDM - LC connectors - 10km | -2 ... +3dBm | -10 dBm |
| OH-TR-4-XXXX-LC | Optical Transceiver (TR) SFP Module - CWDM - LC connectors - 40km | -1dBm | -20dBm |
| OH-TR-8-XXXX-LC | Optical Transceiver (TR) SFP Module - CWDM - LC connectors - 80km | +3dBm | -26dBm |

### Table F - Fiber Optic Data SFP Transceivers

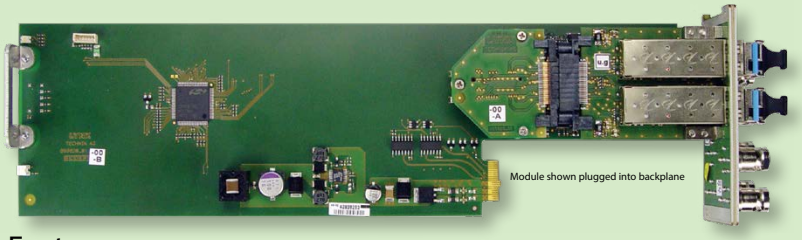
| Basic Fiber | | Power | Sensitivity |
|---|---|---|---|
| OH-TR-51-LC | Optical Transceiver (TR) SFP -1310nm (non CWDM) - LC - 10km | -5dBm | -18dBm |
| OH-TR-50-850-MM | Optical Transceiver (TR) SFP - Multimode - 850nm - LC - 550m | -5dBm | -15dBm |
| **CWDM Fiber** Specify wavelength when ordering (ITU-T G694.2 wavelengths 1270 to 1610nm available) | | | |
| OH-TR-54-XXXX-LC | Optical Transceiver (TR) SFP Module - CWDM - LC connectors - 40km | -5 ... 0dBm | -23dBm |
| OH-TR-58-XXXX-LC | Optical Transceiver (TR) SFP Module - CWDM - LC connectors - 80km | 0 ... 5dBm | -23dBm |

SDTV HD 1.5G HD 3G FIBER

# FIBER CONVERTERS

OTX 5840

## 3Gbit 4 Channel SDI Fiber Transmitter



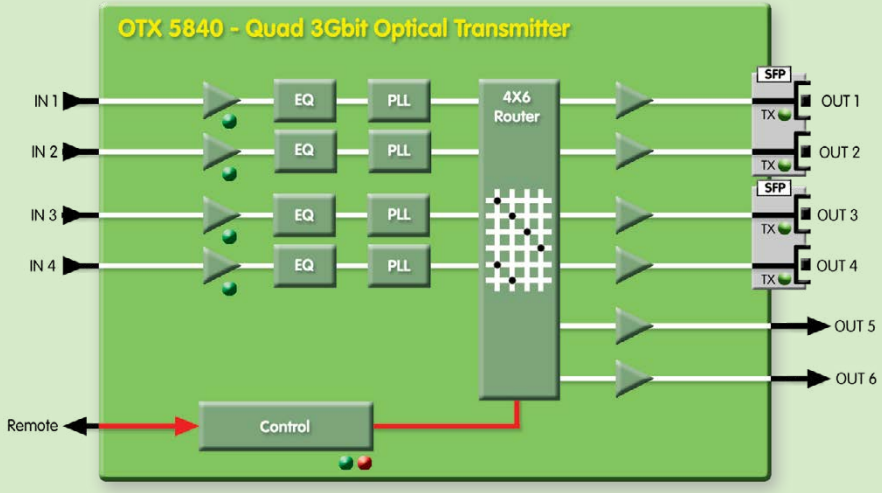

### Features

- 4 independent SDI optical transmitter channels and 2 x electrical outputs
- Supports SDI/ASI/DVB up to 3Gbit/s
- Selection of 18 wavelengths available for CWDM applications
- Reclocking or non-reclocking mode for each channel
- Auto-detects input clock rate
- Transparently pass data between 15Mbit/s and 3Gbit/s in non-reclocked mode.
- Input presence detection with LED indication for each channel
- Internal 4x6 signal router for flexible I/O mapping (via APPolo only)
- Singlemode LC fiber optic connections
- Fiber SFP modules secured in backplane
- Remote control and error reporting when using APPolo control system
- Full SNMP support when used with server option
- Hot swappable


Connection Panel

### Ordering Information

| Model # | Description |
|---|---|
| OTX 5840 | 3Gbit Quad SDI Fiber Transmitter |
| Fiber SFP Options | Select two dual channel fiber transmitter options from Table B |

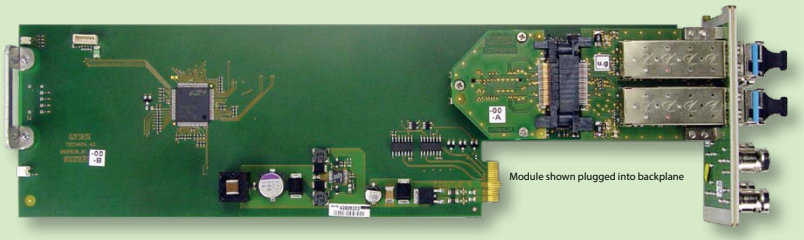



SDTV HD 1.5G HD 3G FIBER

# FIBER CONVERTERS

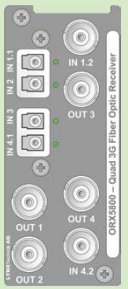
ORX 5800

## 3Gbit 4 Channel SDI Fiber Receiver




### Features

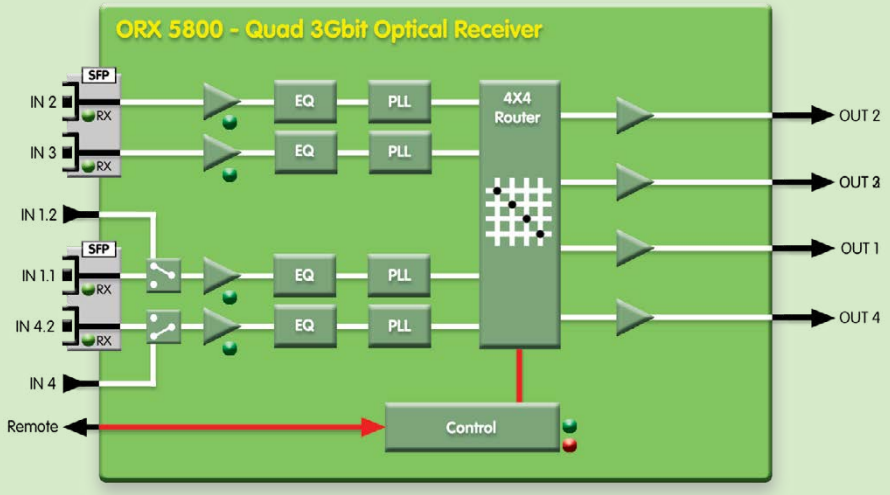
- 4 independent SDI optical receiver channels with 4 x electrical SDI outputs
- Supports SDI/ASI/DVB up to 3Gbit/s
- 1260nm to 1620nm wavelength operational range
- Selectable electrical / optical inputs for 2 channels
- Reclocking or non-reclocking mode for each channel
- Auto-detects input clock rate
- Transparently pass data between 15Mbit/s and 3Gbit/s in non-reclocked mode.
- Input presence detection with LED indication for each channel
- Internal 4x4 signal router for flexible I/O mapping (via APPolo only)
- Singlemode LC fiber optic connections
- Fiber SFP modules secured in backplane.
- Remote control and error reporting when using APPolo control system
- Full SNMP support when used with server option
- Hot swappable




Connection Panel

### Ordering Information

| Model # | Description |
|---|---|
| ORX 5804 | 3Gbit Quad SDI Fiber Receiver |

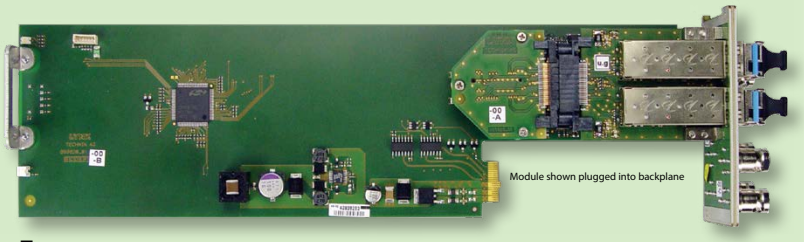


SDTV HD 1.5G HD 3G FIBER

# FIBER CONVERTERS

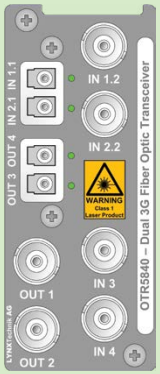
OTR 5840

## 3G-SDI Dual SDI / Fiber Transceiver



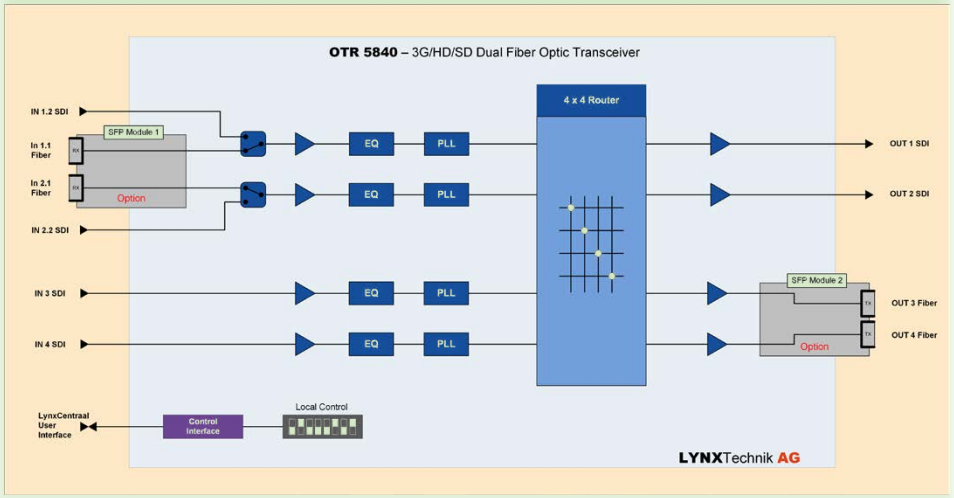

### Features

- 2 independent SDI fiber receiver channels (1260nm - 1620nm)
- 2 Independent SDI fiber transmitter channels
- 2 channels selectable between optical or electrical inputs
- CWDM support, select from 18 wavelengths
- Supports SDI/ASI/DVB to 3G-SDI
- Reclocking or non-reclocking mode for each channel
- Auto-detects input clock rate
- Transparently pass data between 15Mbit/s and 3G-SDI in non-reclocked mode.
- Input presence detection with LED indication for each channel
- Internal 4x4 router for flexible I/O mapping (via LynxCentraal only)
- Singlemode LC fiber optic connections
- Fiber SFP modules secured in backplane
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| OTR 5842 | 3G-SDI Dual SDI / Fiber Transceiver |
| Fiber SFP Option | Select dual channel fiber transmitter option from Table B (receiver SFP included) |




SDTV HD 1.5G HD 3G FIBER

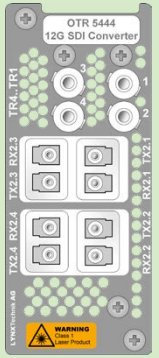
# FIBER CONVERTERS

OTR 5444

## 12G-SDI Bi-directional Quad SDI/Fiber Transceiver

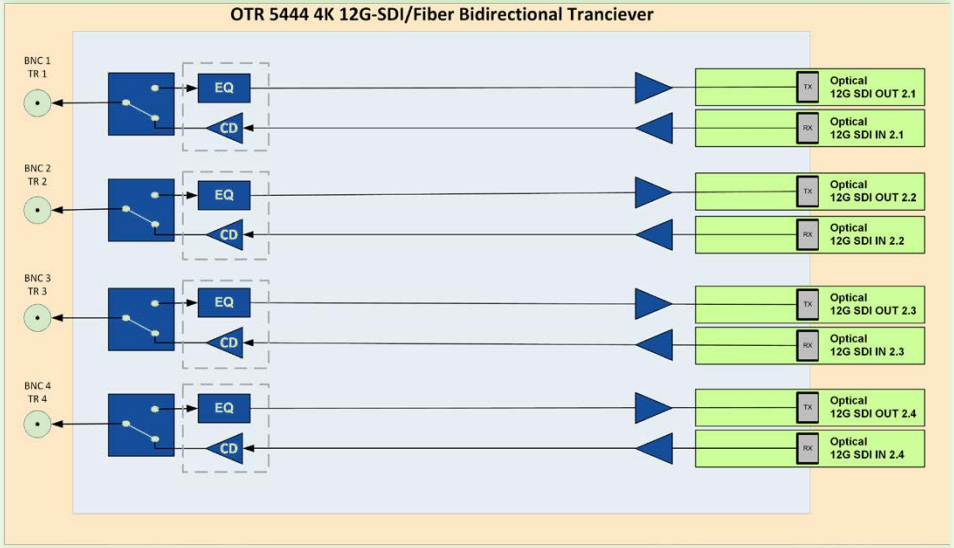

### Features

- Bi-directional electrical to optical and optical to electrical conversion up to 12GSDI
- Four independent 12G-SDI Channels (8K quad-channel optical <> electrical conversion)
- 4 x Optical Transceivers (TR)
- 4 x High-density BNCs (TR)
- Incoming and outgoing 12G-SDI signals are reclocked.
- Input presence detection with LED indication
- Microprocessor controlled with internal flash RAM for storing configuration
- Remote control, status monitoring and error reporting when used with LYNX LynxCentraal Control System
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| OTR 5444 | 12G-SDI Bi-directional Quad SDI/Fiber Transceiver |
| Fiber SFP Option | Select fiber transceiver options from Table E |

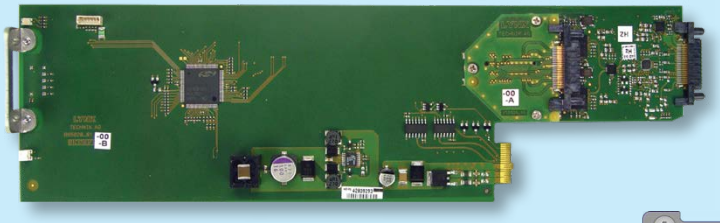


SDTV HD 1.5G HD 3G FIBER

# DIGITAL VIDEO DISTRIBUTION

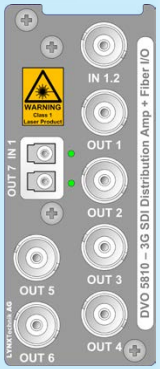
DVO 5810

## 3G/HD/SD - SDI/ASI Distribution Amplifier ( With fiber I/O )



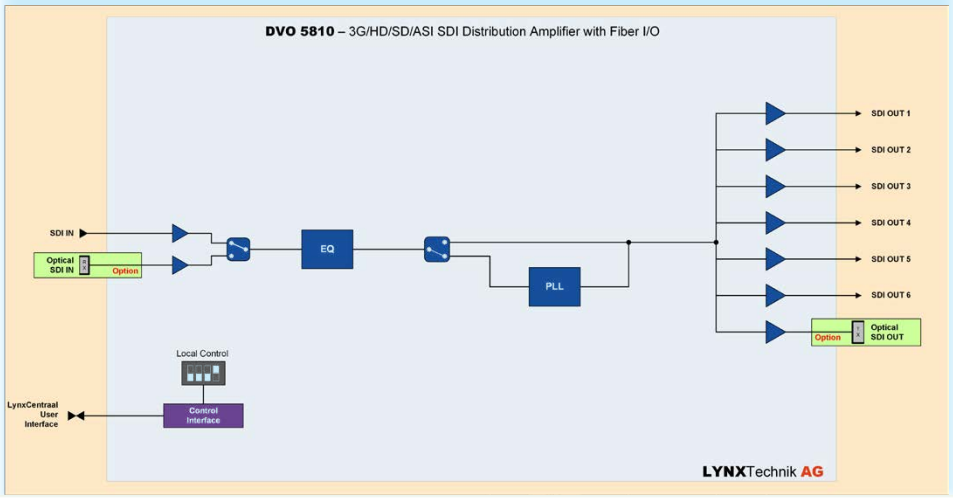
### Features

- Supports SDI / ASI / DVB up to 3G-SDI
- Electrical or optical SDI inputs (selectable)
- 6 x electrical and 1 x optical SDI outputs
- Reclocking or non-reclocking of input (selectable)
- Auto-detect input video standard.
- CWDM support with 18 selectable optical wavelengths (non CWDM option available)
- Transparently pass data between 15Mbit/s and 3G-SDI in non re-clocked mode
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication
- Singlemode LC fiber connections
- Fiber SFP in backplane
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVO 5810 | 3G/HD/SD - SDI/ASI Distribution Amplifier with Optical I/O |
| Fiber SFP Option | Select fiber transceiver option from Table E |

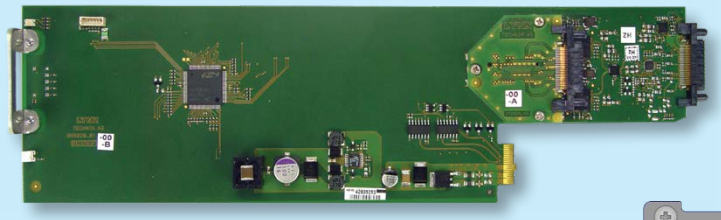



SDTV HD 1.5G HD 3G FIBER

# DIGITAL VIDEO DISTRIBUTION

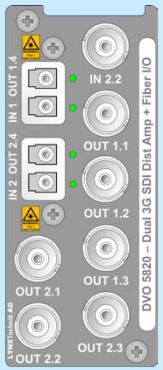
DVO 5820

## 3G/HD/SD - Dual SDI/ASI Distribution Amplifier ( With fiber I/O )



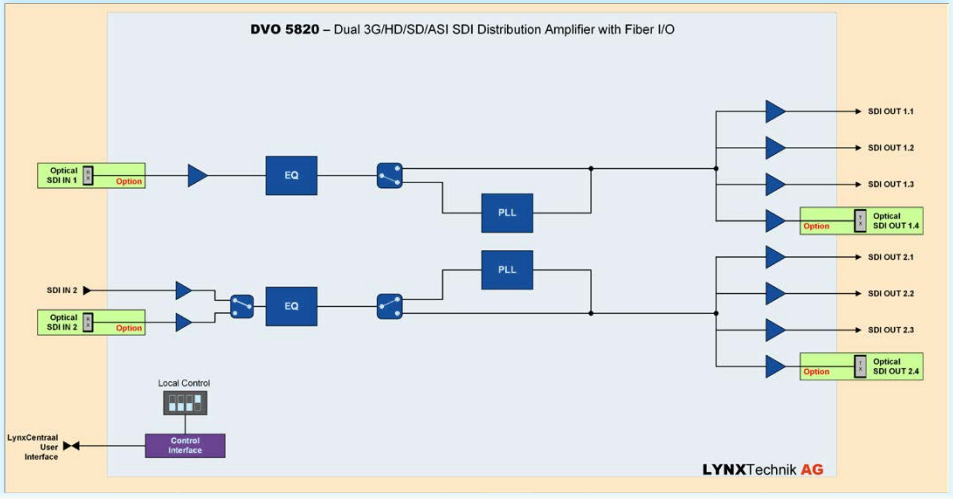
### Features

- Supports SDI / ASI / DVB up to 3G-SDI
- Dual channel 1>4
- 2 optical inputs, with selectable electrical input on channel 2
- 3 x electrical and 1 x optical outputs per channel
- CWDM support with 18 selectable optical wavelengths
- Reclocking or non-reclocking mode for each channel
- Auto-detect input video standard
- Transparently pass data between 15Mbit/s and 3G-SDI in non re-clocked mode.
- Microprocessor controlled with internal flash ram for storing configuration
- Input presence detection with LED indication for each channel
- Singlemode LC fiber connections
- Fiber SFP in backplane
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| DVO 5820 | 3G/HD/SD - Dual SDI/ASI Distribution Amplifier with Fiber I/O |
| Fiber SFP Option | Select two fiber transceiver SFP options from Table E |

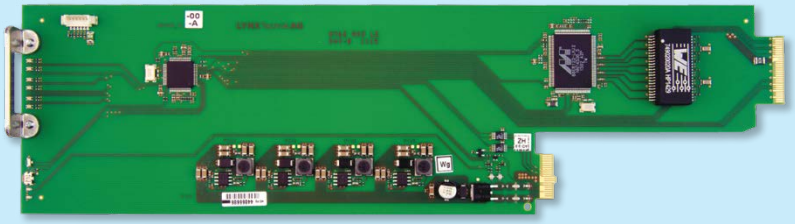


FIBER

# ETHERNET OVER FIBER

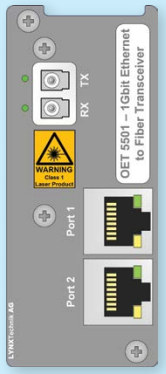
OET 5501

## 1 Gbit Ethernet to Fiber Optic Transceiver



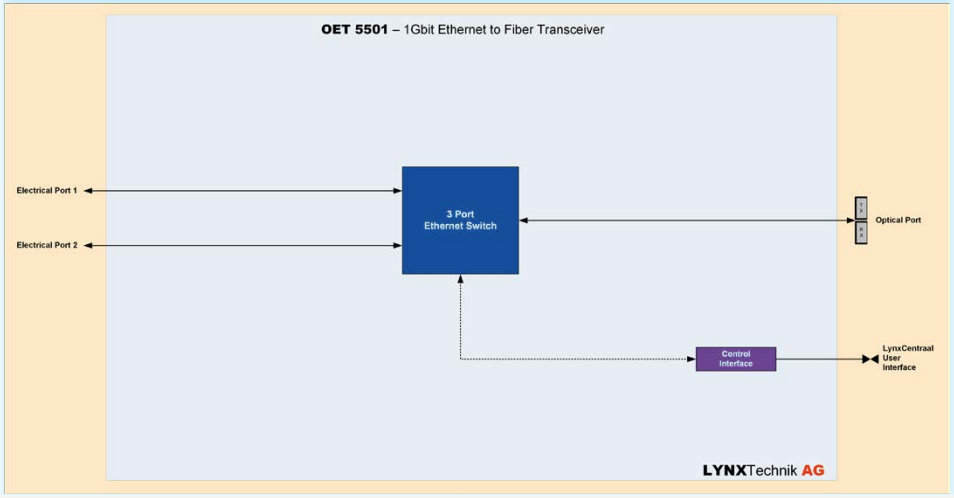
### Features

- Support for standard Ethernet inputs up to 1 Gbit
- 3 port Ethernet switch (1 fiber, 2 electrical)
- Support for Jumbo Frames
- Auto (10/100/1000) electrical port speed detection
- Manually force 10 Mbit electrical speed (if needed)
- Fiber transceiver speed always 1 Gbit
- Auto or manual electrical crossover selection
- Remote control, status monitoring and error reporting possible when used with LynxCentraal control system.
- Hot Swappable
- Variety of fiber SFP Transceiver options
  - Standard singlemode up to 10km (1310nm)
  - Standard multimode up to 550m (850nm)
  - CWDM 40km with 18 wavelength selections
  - CWDM 80km with 8 wavelength selections




### Ordering Information

| Model # | Description |
|---|---|
| OET 5501 | 1Gbit Ethernet to Fiber Optic Transceiver |
| Fiber SFP Option | Select fiber transceiver SFP option from Table F |

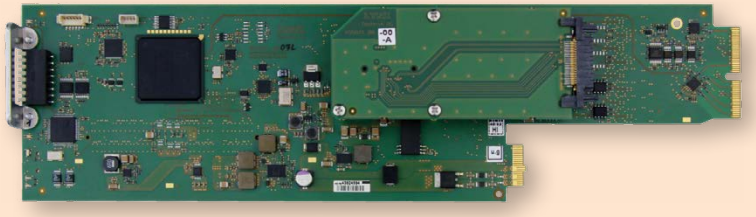



SDTV HD 1.5G HD 3G FIBER

# AUDIO EMBEDDING / DE-EMBEDDING

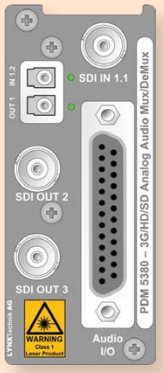
PDM 5380 O

## 3G/HD/SD - 8 Ch. Analog Audio Embedder / De-embedder



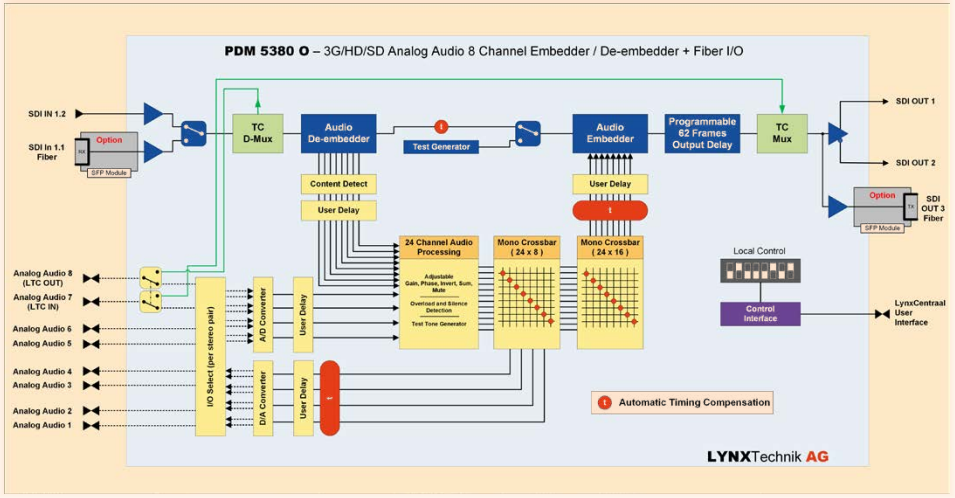
### Features

- Supports SDI formats up to 3Gbit (auto-detect)
- Optional fiber I/O
- Switch between 8 channel analog audio embedder or de-embedder
- 24 channel audio processing stage with adjustable gain, phase invert, mute and stereo to mono mixdown. Also provides overload and silence detection.
- 24 x 24 mono output crossbar for embedder and external audio channel assignment.
- Selectable "Auto Pattern Function" with no input video - the module will embed audio in a selectable test pattern.
- Up to 62 frames of programmable delay.
- Up to 10 seconds of audio delay (total).
- Embed or de-embed Timecode using two of the audio inputs if needed.
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| PDM 5380 O | 3G/HD/SD - 8 Channel Analog Audio Embedder / De-embedder |
| Fiber SFP Option | Select transmitter (Table A) or receiver (Table B) or transceiver (Table E) SFP option |

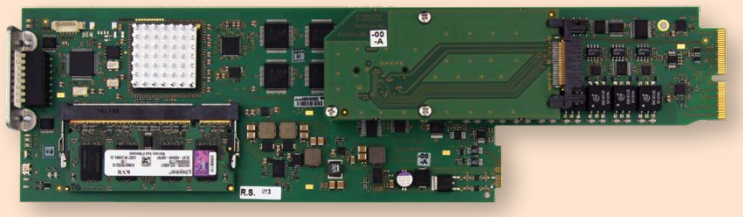


SDTV HD 1.5G HD 3G FIBER

# AUDIO EMBEDDING / DE-EMBEDDING

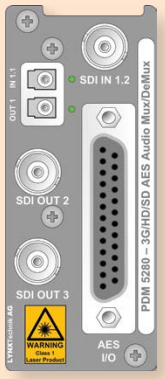
PDM 5280 DO

## 3G/HD/SD - 16 Channel AES Embedder / De-embedder



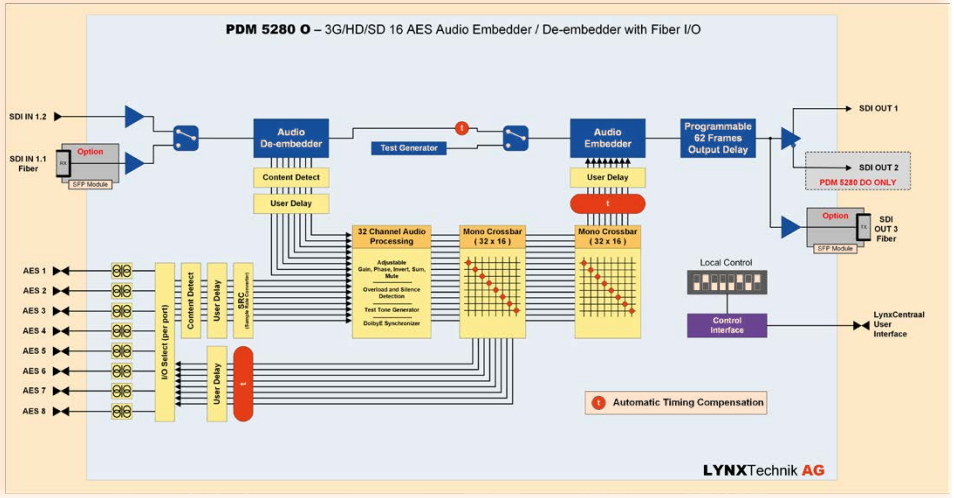
### Features

- Supports SDI formats up to 3Gbit (auto-detect)
- Optional fiber I/O
- Switch between 16 channel embedder or de-embedder or combination of both
- 32 channel audio processing stage with adjustable gain, phase invert, mute and stereo to mono mixdown plus overload and silence detection
- 32 x 32 mono output crossbar for embedder and external audio channel assignment
- Selectable "Auto Pattern Function" with no input video the module will embed audio in a selectable test pattern
- DolbyE Synchronizer to maintain Guard Band
- Up to 62 frames of programmable delay
- Up to 10 seconds audio delay (total)
- Two versions available for balanced and unbalanced AES
- All external audio inputs / outputs are transformer coupled
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| PDM 5280 DO | 3G/HD/SD - 16 Ch. Audio Embedder / De-embedder (SubD - balanced AES) |
| Fiber SFP Option | Select transmitter (Table A) or receiver (Table B) or transceiver (Table E) SFP option |

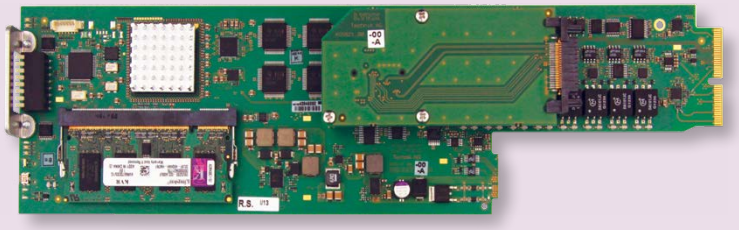



SDTV HD 1.5G HD 3G FIBER

# FRAME SYNCHRONIZATION

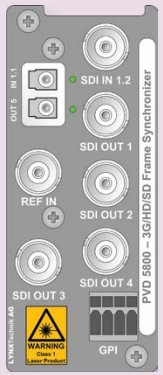
PVD 5800 O

## 3G/HD/SD SDI Frame Synchronizer



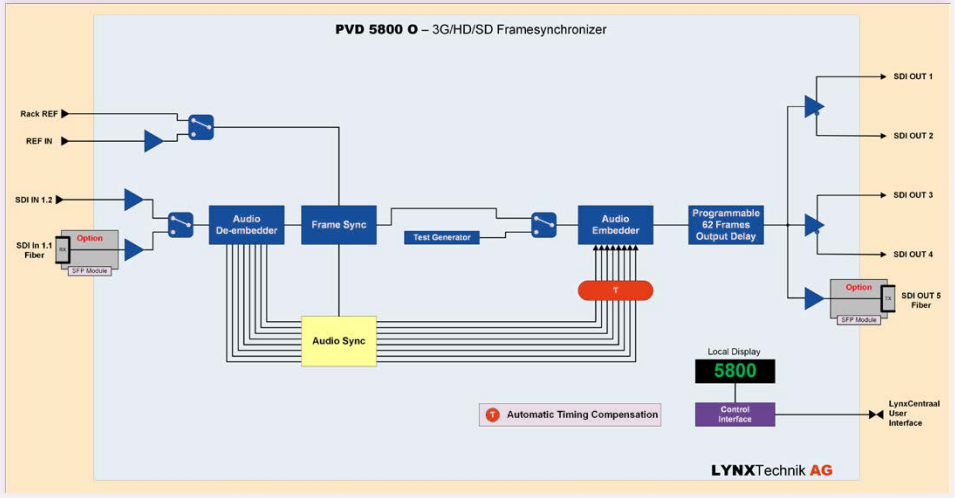
### Features

- Supports SDI formats up to 3Gbit (auto-detect)
- Optional fiber I/O
- Robust "flywheel" synchronization for a wide variety of problematic sources
- "Cross lock" compatible reference input
- All 16 channels of audio de-embedded from SDI input, delayed to match video processing delay and re-embedded
- 4 x SDI outputs provided
- Integrated test pattern generator
- Auto-tracking audio delay with no "pops" or "clicks" in audio even when dropping and adding frames
- Up to 62 frames of programmable delay
- Remote control and error reporting when using LynxCentraal control system
- Full SNMP support when used with server option
- Hot swappable




### Ordering Information

| Model # | Description |
|---|---|
| PVD 5800 O | 3G/HD/SD SDI Frame Synchronizer with optonal fiber I/O |
| Fiber SFP Option | Select transmitter (Table A) or receiver (Table B) or transceiver (Table E) SFP option |



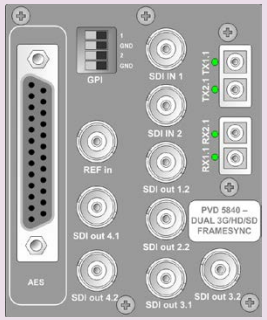
SDTV HD 1.5G HD 3G FIBER

# FRAME SYNCHRONIZATION

PVD 5840 DO

## 3G/HD/SD Dual Channel SDI Frame Synchronizer + Image and Audio Processing

### Connection Panel Options



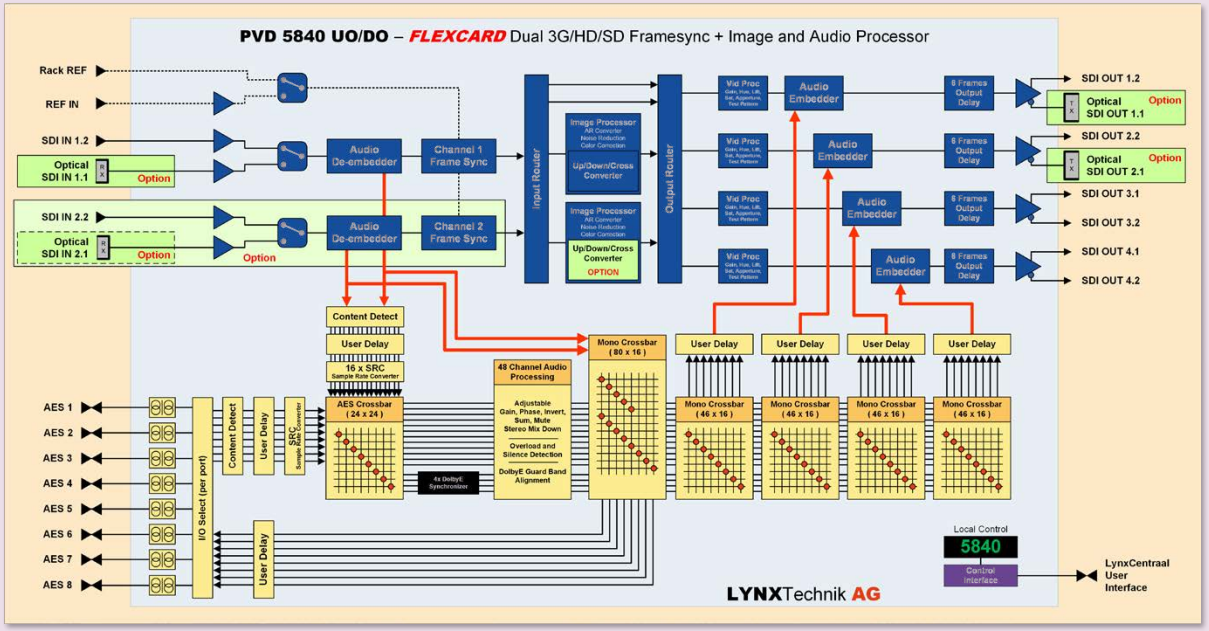

Balanced AES3 Audio
25 pin SubD Connector

### Features

- Compact dual channel frame synchronizer
- Optional fiber I/O
- Support for SDI video formats up to 3Gbit
- Bi-level or tri-level reference input, auto detect, cross lock compatible
- Robust "flywheel" frame synchronizer functionality
- Seamless switching between input sources (with second input option)
- Integrated Image processing includes:
  - 2 channel aspect ratio converter
  - 2 channel noise reduction
  - 2 channel RGB gain and lift color correction
  - 1 channel UP/DOWN/CROSS conversion
- Firmware plug in options:
  - OC-5840-SCND - Second Input Option
  - OC-5840-UPXD2 - UP/DOWN/CROSS conversion channel 2
  - OC-5840-3G-LEVELB-DL - Level B (DL) support and A<>B conversions
- 4 independent SDI outputs, user mapped to any internal resource
- Each output (4) has independent 10 bit digital video processing providing:
  - Adjustable gain, saturation, black level and hue
  - Adjustable aperture correction
  - Color space conversion ( 601 > 709 or 709 > 601 )
  - Integral test pattern generator with multiple patterns
  - Adjustable output timing delay (3 frame)
- Automatically detect audio content PCM / DolbyE / compressed bitstream
- De-embed complete audio payload from each SDI input (16 channels)
- 8 x external AES inputs and / or outputs (transformer coupled)
- 24 x 24 AES audio input crossbar
- Individually selectable sample rate converters (on/off) for de-embedded audio and external audio inputs
- Selectable audio pathways through synchronizer
  - 20 x AES - Internal
  - 4 x AES - Through 4 x DolbyE synchronizers
  - 8 x AES bypass channel synchronized to SDI input 1
  - 8 x AES bypass channels synchronized to SDI input 2
- 48 channel audio processing with adjustable gain / phase / mute / sum
- 48 channel overload and silence detection
- Audio is delayed to track video synchronizer automatically
- User adjustable audio delays in multiple zones
- DolbyE synchronizers automatically maintain guard band timing
- No "pops and clicks" in audio even when frames are dropped / added
- 4 Independent output embedders (16 channel) for each output
- 4 independent 48 x 16 mono output crossbars
- 80 x 16 mono crossbar for external AES outputs
- Store 7 module user presets, and switch between four with GPI
- Two external GPI inputs, user configurable:
  - Seamless switch between inputs (with second input option)
  - Freeze input 1 (or 2 with second input option)
- AFD / WSS / VI / Closed Caption and Timecode metadata transcoding
- Remote control and error reporting when using APPolo control system
- Hot swappable

### Ordering Information

| Part # | Description |
|---|---|
| 5155055840 | PVD 5840 DO - 3G/HD/SD SDI Dual Frame Synchronizer + Audio Processing (balanced AES3 on SubD) |
| 1300000018 | OC-5840-SCND - Second SDI input option for PVD 5840 |
| 1300000020 | OC-5840-UPXD - Second channel high quality UP/DOWN/CROSS conversion |
| 1300000088 | OC-5840-3G-LEVELB-DL - Level B (DL) support and Leve A to Level B conversions |
| Fiber SFP Options | For single channel Fiber I/O chose SFP's from Tables A and C, for dual channel fiber I/O chose SFPs from Tables B and D |



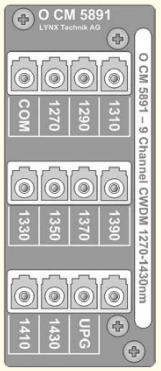
# OPTICAL CWDM MULTIPLEXERS

OCM 5891

## 9 Channel Optical Multiplexer / De-multiplexer

### Features

- 9 channel CWDM optical multiplexer / de-multiplexer
- Wavelengths according to ITU-T G.694.2
- Send and / or receive up to 9 channels over a single fiber connection
- Passive operation (no power needed)
- Designed to fit in R FR 5012, R FR 5013, R FR 5014 and R FR 5041 Frames
- Installs from rear of rack (uses one rack slot)
- LC fiber connections, singlemode
- UPG port for expansion (connect to O CM 5892 to add 9 more channels)
- Use with LYNX modules configured with CWDM fiber SFP options

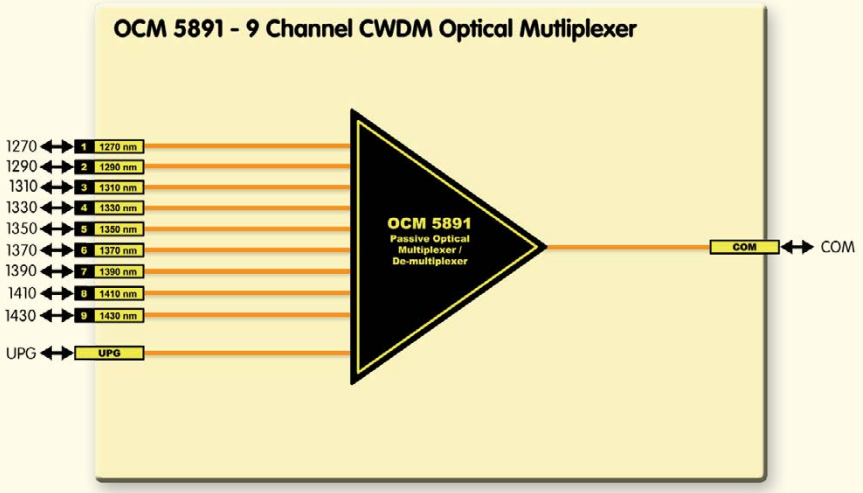



| | |
|---|---|
| Optical I/O | 9 x Fiber Optic I/O channels |

| | |
|---|---|
| Channel 1 = 1270nm | Channel 6 = 1370nm |
| Channel 2 = 1290nm | Channel 7 = 1390nm |
| Channel 3 = 1310nm | Channel 8 = 1410nm |
| Channel 4 = 1330nm | Channel 9 = 1430nm |
| Channel 5 = 1350nm | |

### Ordering Information

| Model # | Description |
|---|---|
| OCM 5891 | 9 Channel Optical Multiplexer / De-multiplexer 1270 - 1430nm |




FIBER

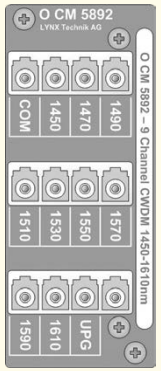
# OPTICAL CWDM MULTIPLEXERS

OCM 5892

## 9 Channel Optical Multiplexer / De-multiplexer

### Features

- 9 channel CWDM optical multiplexer / de-multiplexer
- Wavelengths according to ITU-T G.694.2
- Send and / or receive up to 9 channels over a single fiber connection
- Passive operation (no power needed)
- Designed to fit in R FR 5012, R FR 5013, R FR 5014 and R FR 5041 Frames
- Installs from rear of rack (uses one rack slot)
- LC fiber connections, singlemode
- UPG port for expansion (connect to O CM 5891 to add 9 more channels)
- Use with LYNX modules configured with CWDM fiber SFP options

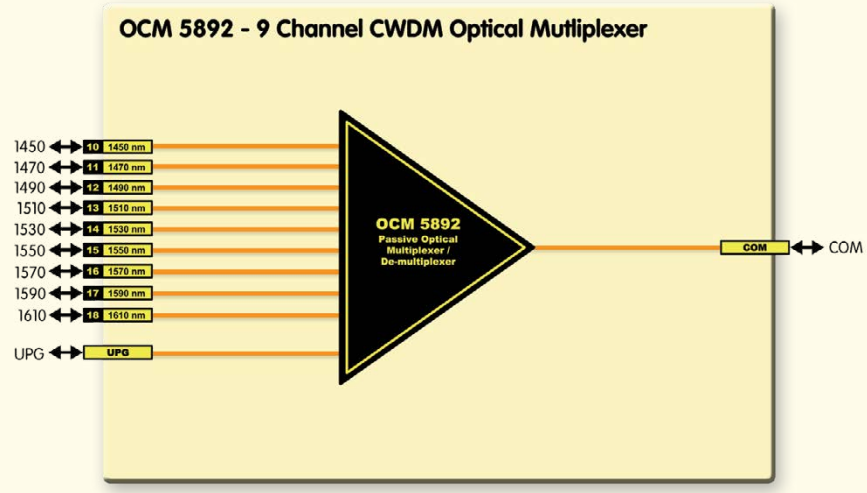



| | |
|---|---|
| Optical I/O | 9 x Fiber Optic I/O channels |

| | |
|---|---|
| Channel 10 = 1450nm | Channel 15 = 1550nm |
| Channel 11 = 1470nm | Channel 16 = 1570nm |
| Channel 12 = 1490nm | Channel 17 = 1590nm |
| Channel 13 = 1510nm | Channel 18 = 1610nm |
| Channel 14 = 1530nm | |

### Ordering Information

| Model # | Description |
|---|---|
| OCM 5892 | 9 Channel Optical Multiplexer / De-multiplexer 1450 - 1610nm |

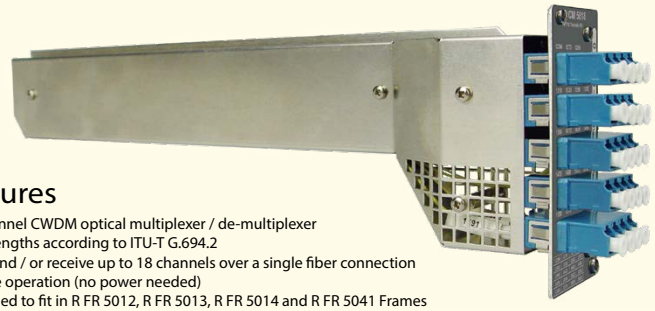


FIBER

# OPTICAL CWDM MULTIPLEXERS

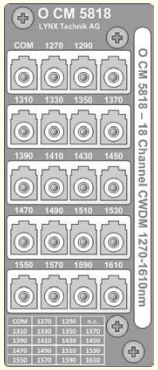
OCM 5818

## 18 Channel Optical Multiplexer / De-multiplexer



### Features

- 18 channel CWDM optical multiplexer / de-multiplexer
- Wavelengths according to ITU-T G.694.2
- Send and / or receive up to 18 channels over a single fiber connection
- Passive operation (no power needed)
- Designed to fit in R FR 5012, R FR 5013, R FR 5014 and R FR 5041 Frames
- Installs from rear of rack (uses one rack slot)
- LC fiber connections, singlemode
- Use with LYNX modules configured with CWDM fiber SFP options

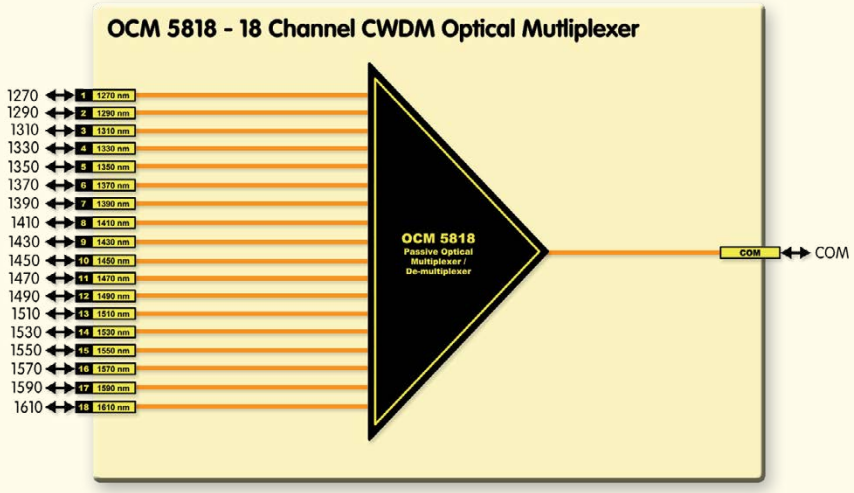



| | |
|---|---|
| Optical I/O | 18 x Fiber Optic I/O channels |

| | | |
|---|---|---|
| Channel 1 = 1270nm | Channel 7 = 1390nm | Channel 13 = 1510nm |
| Channel 2 = 1290nm | Channel 8 = 1410nm | Channel 14 = 1530nm |
| Channel 3 = 1310nm | Channel 9 = 1430nm | Channel 15 = 1550nm |
| Channel 4 = 1330nm | Channel 10 = 1450nm | Channel 16 = 1570nm |
| Channel 5 = 1350nm | Channel 11 = 1470nm | Channel 17 = 1590nm |
| Channel 6 = 1370nm | Channel 12 = 1490nm | Channel 18 = 1610nm |

### Ordering Information

| Model # | Description |
|---|---|
| OCM 5818 | 18 Channel Optical Multiplexer / De-multiplexer 1270 - 1610nm |

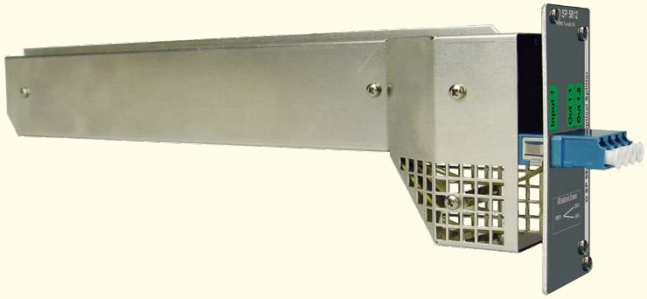



FIBER

# OPTICAL SPLITTERS

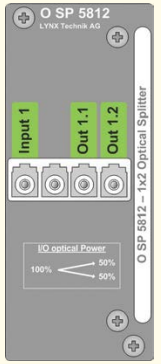
OSP 5812

## 1>2 Optical Splitter (50/50)



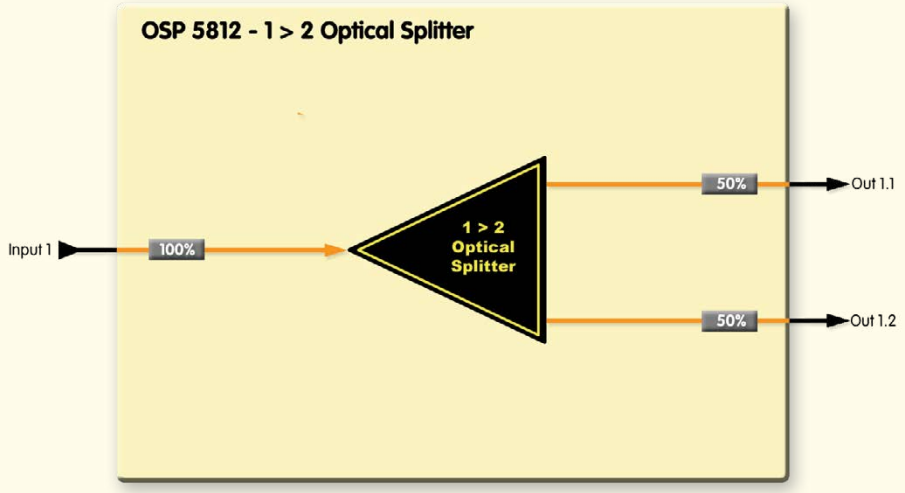
### Features

- Precision 1>2 optical splitter
- 50% / 50% split ratio
- Passive operation (requires no power)
- Compatible with all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

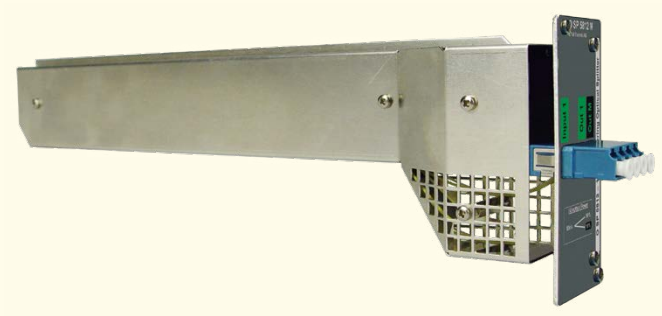
| Model # | Description |
|---|---|
| OSP 5812 | 1>2 Optical Splitter (50/50) |



# OPTICAL SPLITTERS

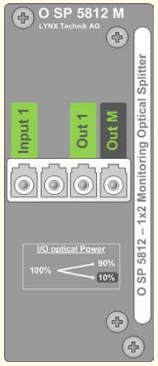
OSP 5812 M

## 1>2 Monitoring Optical Splitter (90/10)



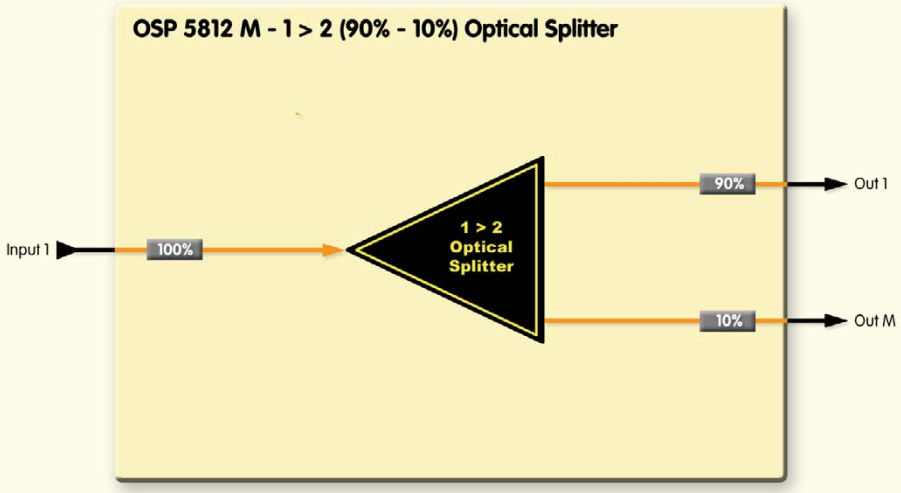
### Features

- Precision 1>2 optical splitter
- 90% / 10% split ratio (for monitoring applications)
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

| Model # | Description |
|---|---|
| OSP 5812 M | 1>2 Monitoring Optical Splitter (90/10) |



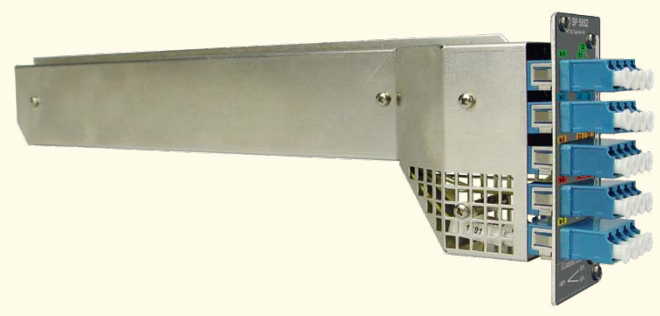





# OPTICAL SPLITTERS

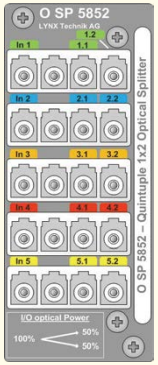
OSP 5852

## 5 Channel 1>2 Optical Splitter (50/50)



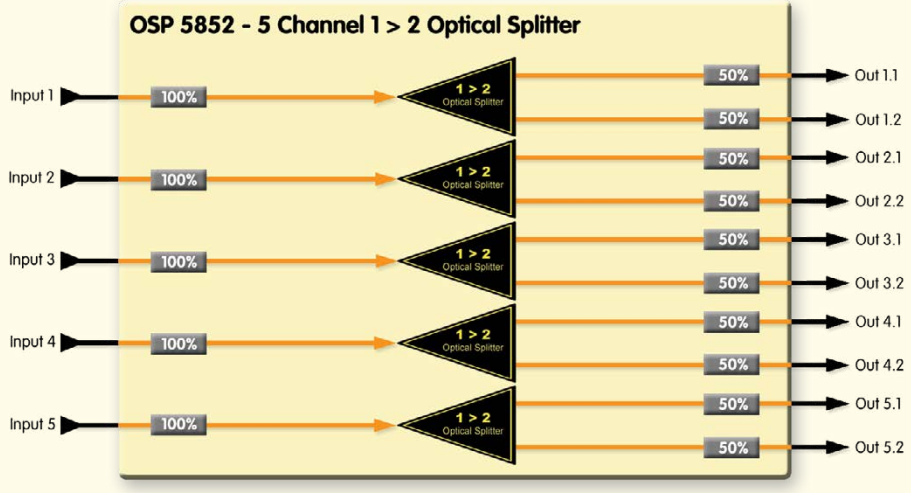
### Features

- Five 1>2 optical splitters in a single module
- Precision 1>2 optical splitter
- 50% / 50% split ratio
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

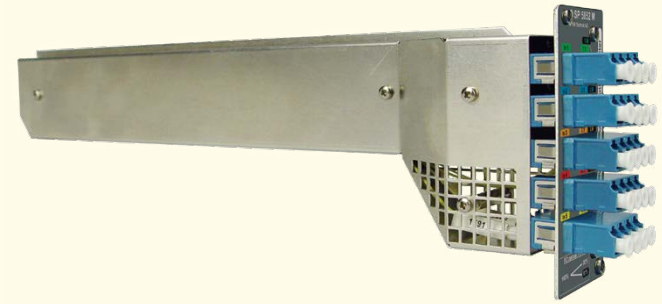
| Model # | Description |
|---|---|
| OSP 5852 | 5 channel 1>2 Optical Splitter (50/50) |



# OPTICAL SPLITTERS

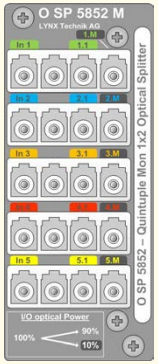
OSP 5852 M

## 5 Channel 1>2 Monitoring Optical Splitter (90/10)



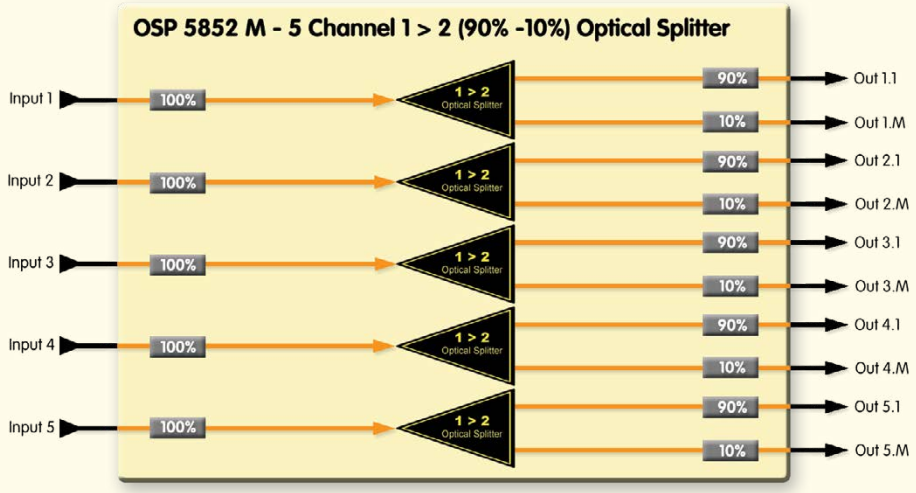
### Features

- Five 1>2 optical splitters in a single module
- Precision 1>2 optical splitter
- 90% / 10% split ratio (for monitoring applications)
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

| Model # | Description |
|---|---|
| O SP 5852 M | 5 channel 1>2 Monitoring Optical Splitter (90/10) |

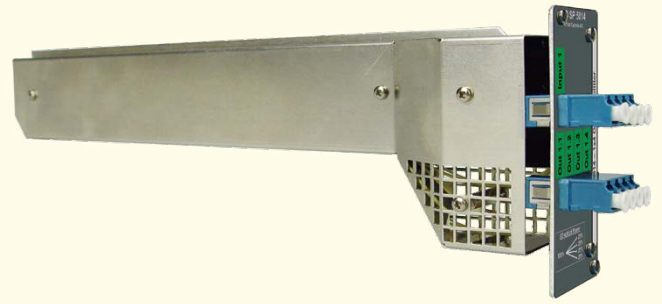



FIBER

# OPTICAL SPLITTERS

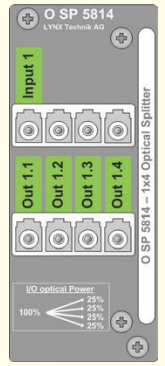
OSP 5814

## 1>4 Optical Splitter (25/25/25/25)



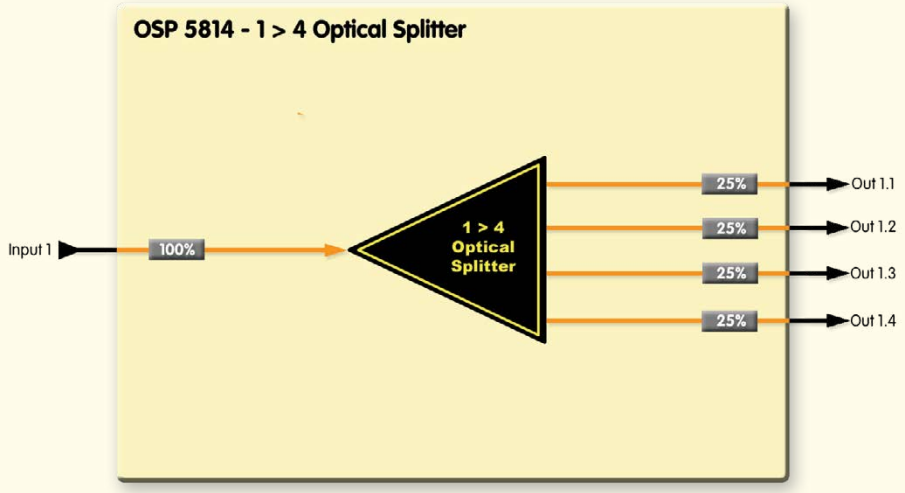
### Features

- Precision 1>4 optical splitter
- 25% / 25% / 25% / 25% split ratio
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

| Model # | Description |
|---|---|
| O SP 5814 | 1>4 Optical Splitter (25/25/25/25) |



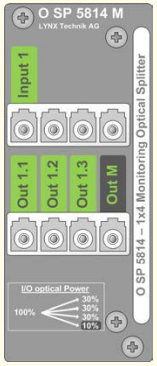
# OPTICAL SPLITTERS

OSP 5814 M

## 1>4 Monitoring Optical Splitter (30/30/30/10)

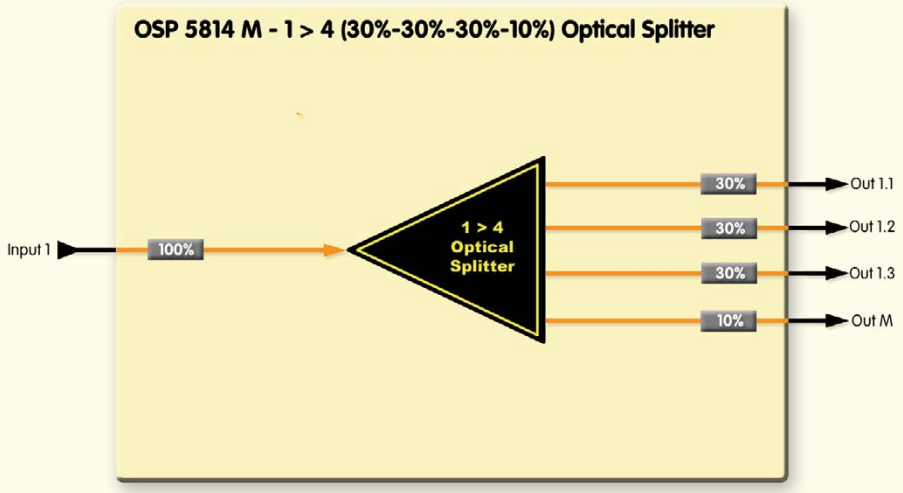
### Features

- Precision 1>4 optical splitter
- 30% / 30% / 30% / 10% split ratio (for monitoring applications)
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

| Model # | Description |
|---|---|
| OSP 5814 M | 1>4 Monitoring Optical Splitter (30/30/30/10) |

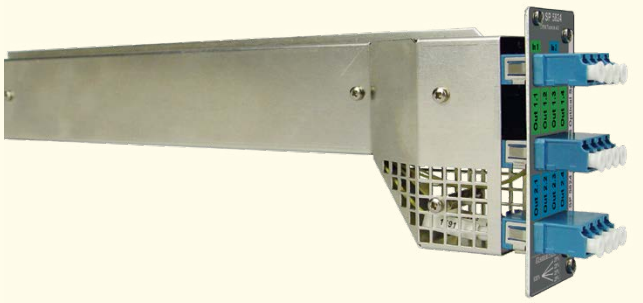



FIBER

# OPTICAL SPLITTERS

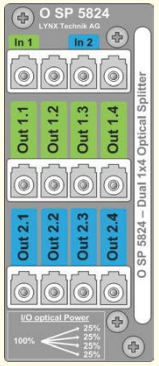
OSP 5824

## Dual Channel 1>4 Optical Splitter (25/25/25/25)



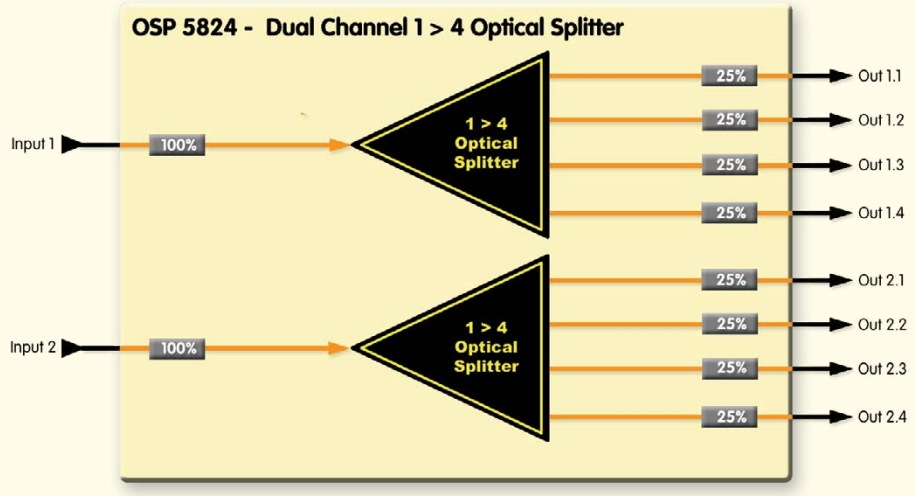
### Features

- Two 1>4 splitters in a single module
- Precision 1>4 optical splitter
- 25% / 25% / 25% / 25% split ratio
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

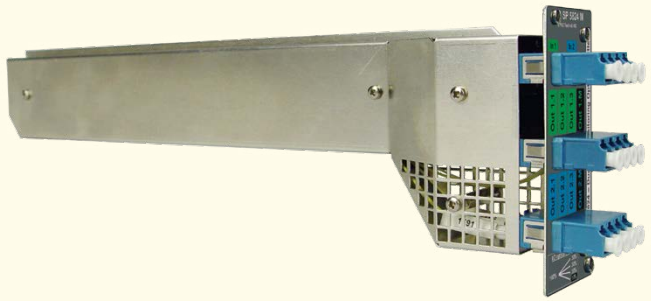
| Model # | Description |
|---|---|
| OSP 5824 | Dual Channel 1>4 Optical Splitter (25/25/25/25) |



# OPTICAL SPLITTERS

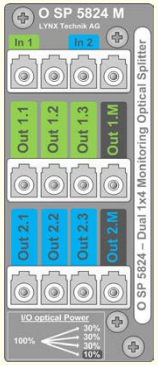
## OSP 5824 M

### Dual Channel 1>4 Monitoring Optical Splitter (30/30/30/10)



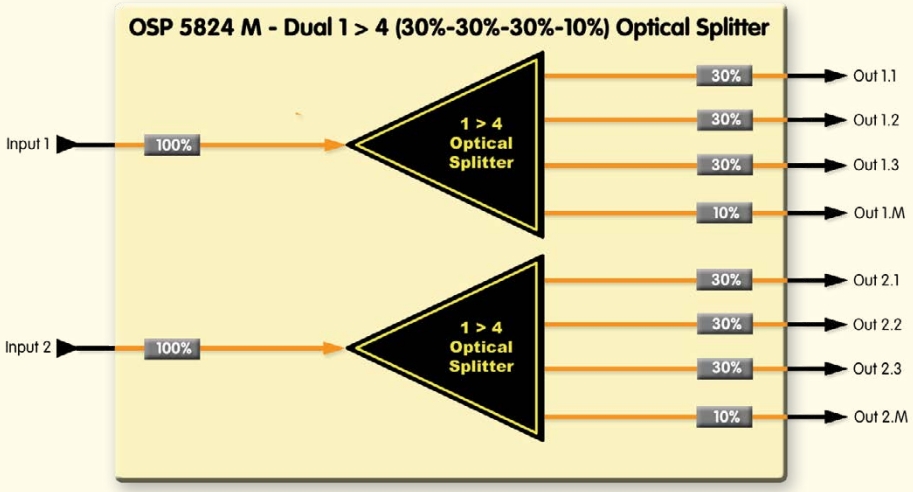
### Features

- Two 1>4 splitters in a single module
- Precision 1>4 optical splitter
- 30% / 30% / 30% / 10% split ratio (for monitoring applications)
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

| Model # | Description |
|---|---|
| O SP 5824 M | Dual Channel 1>4 Monitoring Optical Splitter (30/30/30/10) |

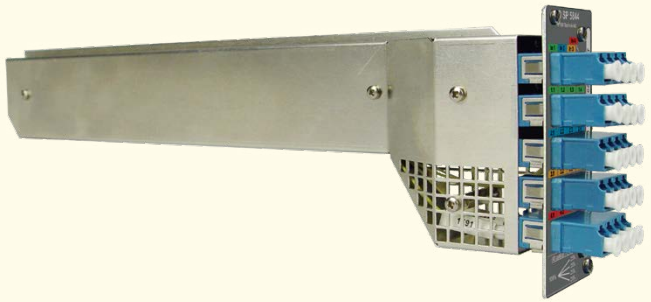





# OPTICAL SPLITTERS

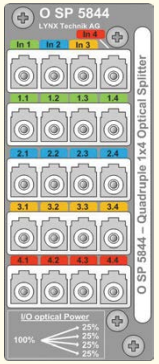
## OSP 5844

### 4 Channel 1>4 Optical Splitter (25/25/25/25)



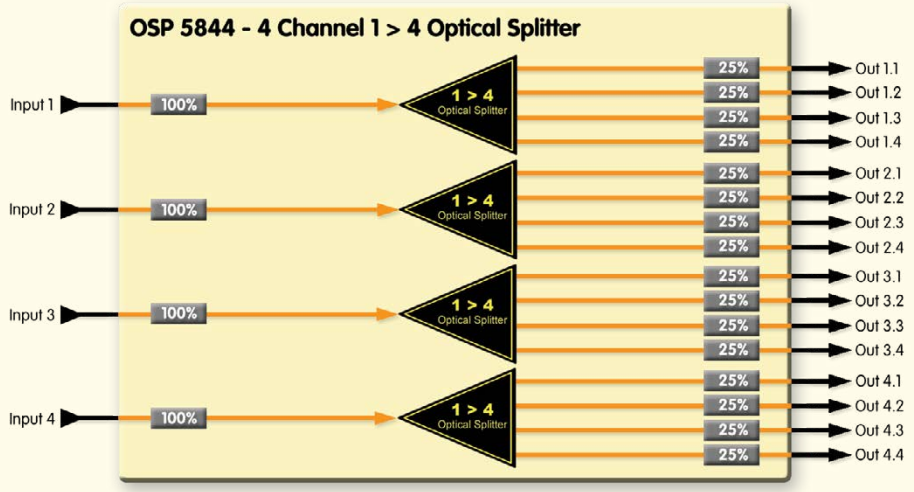
### Features

- Four 1>4 splitters in a single module
- Precision 1>4 optical splitter
- 25% / 25% / 25% / 25% split ratio
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

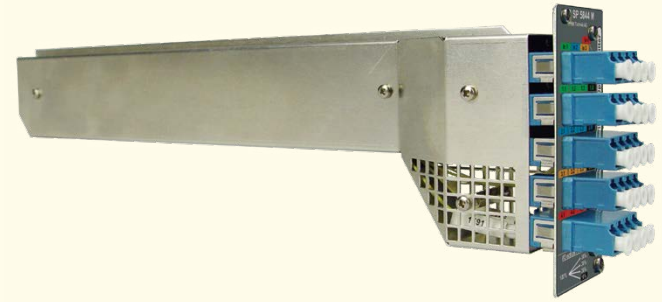
| Model # | Description |
|---|---|
| O SP 5844 | 4 Channel 1>4 Optical Splitter (25/25/25/25) |



# OPTICAL SPLITTERS

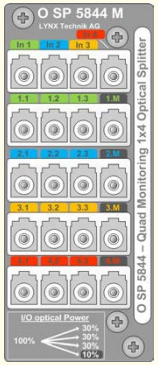
## OSP 5844 M

### 4 Channel 1>4 Monitoring Optical Splitter (30/30/30/10)



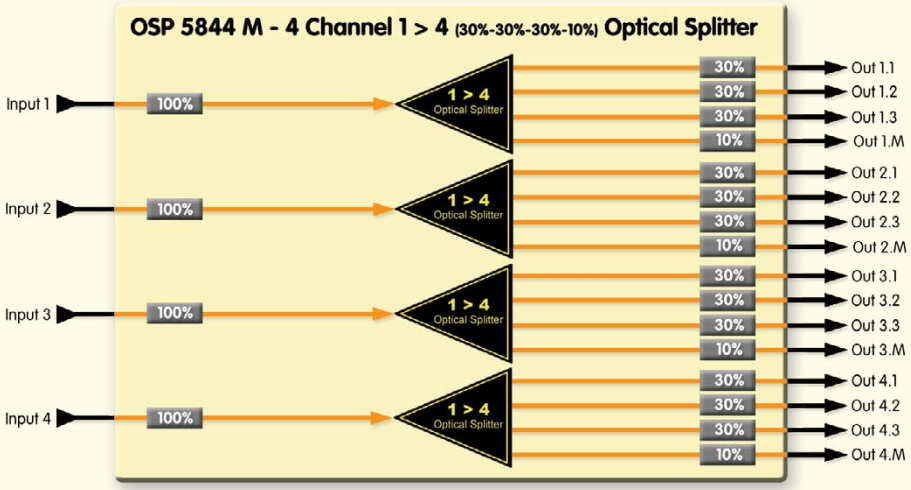
### Features

- Four 1>4 splitters in a single module
- Precision 1>4 optical splitter
- 30% / 30% / 30% / 10% split ratio (for monitoring applications)
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode




### Ordering Information

| Model # | Description |
|---|---|
| OSP 5844 M | 4 Channel 1>4 Monitoring Optical Splitter (30/30/30/10) |

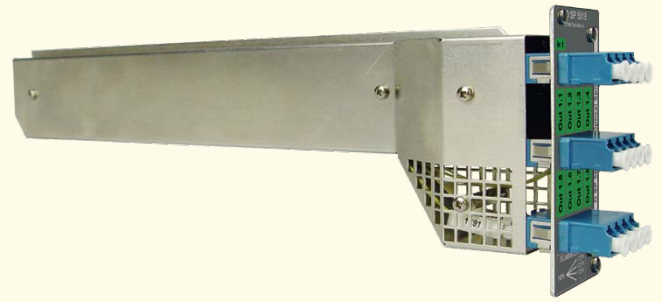



FIBER

# OPTICAL SPLITTERS

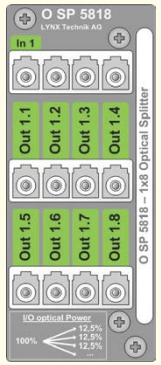
## OSP 5818

### 1>8 Optical Splitter (12.5/12.5/12.5/12.5/12.5/12.5/12.5/12.5)



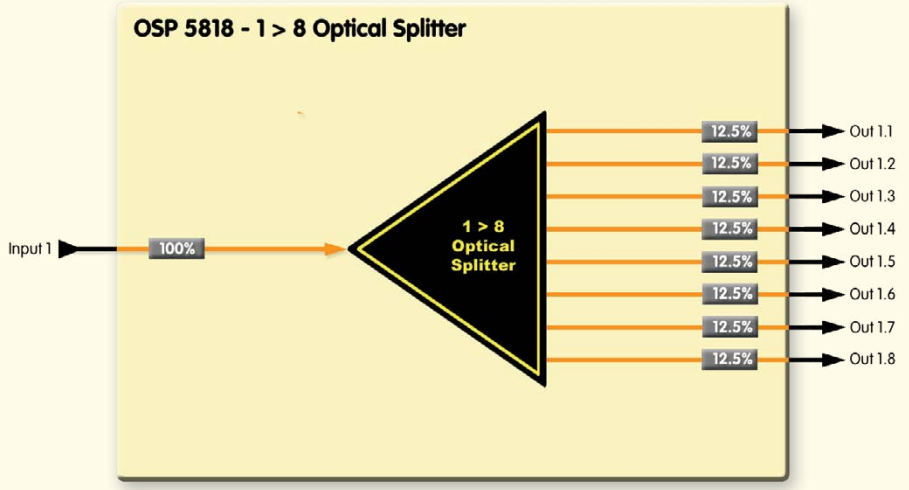
### Features

- Precision 1>8 optical splitter
- 12.5% / 12.5% / 12.5% / 12.5% / 2.5% / 12.5% / 12.5% / 12.5% split ratio
- Passive operation (requires no power)
- Compatible will all Series 5000 rack frames (2RU and 1RU)
- Occupies one card slot
- Installs from rear of rack
- LC fiber connections, singlemode



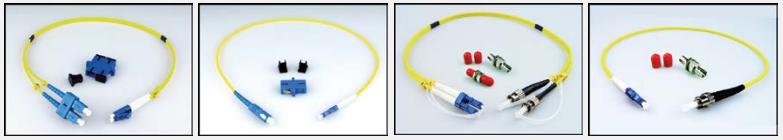

### Ordering Information

| Model # | Description |
|---|---|
| OSP 5818 | 1>8 Optical Splitter |



FIBAER CABLES

## Fiber Adapter Kits



LC/SC DUP
Duplex LC to SC adapter

LC/SC SIM
Simplex LC to SC adapter

LC/ST DUP
Duplex LC to ST adapter

LC/ST SIM
Simplex LC to ST adapter

Almost all of the fiber SFP modules we use have LC fiber connections. We provide a range of adapter cables to facilitate the connection into existing fiber infrastructures. SC and ST adapter kits are provided in Simplex (single) or Duplex (dual) form. Each cable is made from singemode fiber, 0.5m long and the kit includes a sex changer. The adapter cables introduce minimal losses to the system.

### Ordering Information

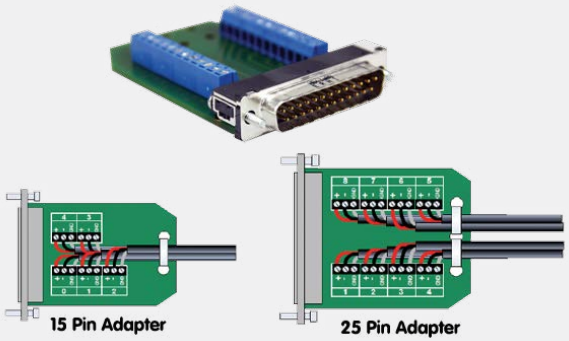
| Model # | Description |
|---|---|
| LC/SC SIM | LC to SC fiber adapter cable (simplex) |
| LC/SC DUP | LC to SC fiber adapter cable (duplex) |
| LC/ST SIM | LC to ST fiber adapter cable (simplex) |
| LC/ST DUP | LC to ST fiber adapter cable (duplex) |
| LC/LC SIM | LC to LC fiber patch cable |

RBO 5015/25

## SubD Audio Adapter PCBs

### Features

Analog audio and balanced AES connections to the modules are made using SubD connectors on the module backplanes (15 or 25 pin). The RBO 5015 and RBO 5025 PCB adapters can be used to facilitate connections via terminal strips. (As an alternative to using the optional breakout cable assemblies; or soldering custom connectors).




### Ordering Information

| Model # | Description |
|---|---|
| RBO 5015 | 15 Pin SubD Audio Adapter PCB |
| RBO 5025 | 25 Pin SubD Audio Adapter PCB |

ACCESSORIES

## Audio Adapter Cables

### Features

For Series | 5000 Modules that utilize SubD connections for balanced audio we provide 6 breakout cables which adapts the SubD connection to standard in line 3 pin XLR connectors.

The table below shows audio adapter cable module compatibility:

| | |
|---|---|
| **RAC M25-8 SubD 25 (male) to 8 x XLR (male)** | |
| Audio adapter cable with 1 x male Sub D 25 pin connector to 8 x Standard in line male XLR connectors. | For use with the following modules:<br>C DA 5220-D, D AA 5320-D, DAD 5321-D,<br>D AD 5220-D, P DM 5240-D, P DM 5280-D,<br>P DM 5290-D, P DM 5380, P VD 5810-D,<br>P VD 5840-D, C DX 5624 |
| **RAC F25-8 SubD 25 (male) to 8 x XLR (female)** | |
| Audio adapter cable with 1 x male Sub D 25 pin connector to 8 x Standard in line female XLR connectors. | For use with the following modules:<br>C AD 5320-D, C MX 5710, P DM 5240-D,<br>P DM 5280-D, P DM 5290-D, P DM 5380,<br>P VD 5810-D, P VD 5840-D |
| **RAC M15-4 SubD 15 (male) to 4 x XLR (male)** | |
| Audio adapter cable with 1 x male Sub D 15 pin connector to 4 x Standard in line male XLR connectors. | For use with the following modules:<br>P TG 5610-D |
| **RAC MF15-2/2 SubD 15 (male) to 2 x XLR (male) and 2 x XLR (female)** | |
| Audio adapter cable with 1 x male Sub D 15 pin connector to 2 x Standard in line male XLR connectors and 2 x standard male XLR in line connectors. | For use with the following modules:<br>C AD 5320-D, C DA 5220-D, D AD 5220-D,<br>D AA 5320-D, D AA 5321-D |

### Ordering Information

| Model # | Description |
|---|---|
| RAC M25-8 | Audio Adapter cable SubD 25 (male) to 8 XLR (male) |
| RAC F25-8 | Audio Adapter cable SubD 25 (male) to 8 XLR (female) |
| RAC M15-4 | Audio Adapter cable SubD 15 (male) to 4 XLR (male) |
| RAC MF15-2/2 | Audio Adapter cable SubD 15 (male) to 2 XLR (male) and 2 x XLR (female) |

# LYNXTechnik AG

LYNX Technik AG is an industry leader and technology provider of terminal equipment, or "glue ware" for broadcast and professional audio-video use. LYNX Technik is an independent and privately-owned company with its research, design, and manufacturing located in Weiterstadt, Germany. Sales and support is covered from our regional headquarters in Germany, Singapore, and the USA.

Our engineering team consists of a multi-talented group of engineers that combine decades of experience from the broadcast and post-production industries. We carefully develop our products in close cooperation with leading broadcasters worldwide, who help specify and define features and performance levels that have produced some of the most flexible and powerful solutions available on the market today.

We have designed the **Series | 5000** product line to offer broadcast professionals an affordable, compact and extremely flexible solution for a variety of audio and video processing tasks. All modules have been designed to meet today's most demanding digital Broadcast requirements and have been configured to meet the 12G, 3G, HD, SD, and Fiber Optic demands across a wide spectrum of audio-visual applications.

Our LynxCentraal control system is the primary value-add component to a system that really sets us aside from other providers. It is a powerful and intuitive application that provides a unique graphical signal flow representation of each module function and can be expanded from a single rack to an extensive multi-rack system that supports literally hundreds of racks located in various locations.

The **Series | 5000** product line is designed around size and flexibility. Small and durable 1RU and 2RU rack frames offer a small footprint which accommodates any mixture of modules. Some modules feature add-on option codes, allowing users to add a variety of sophisticated signal processing features merely by entering a license code – no new hardware or re-programming required.

Terminal equipment is all we do, and over the years we have got exceptionally good at it. We offer many unique capabilities and superior performance at affordable prices. We look forward to being your modular equipment supplier of choice.

Stefan Gnann
CEO **LYNX**Technik **AG**

# Warranty

LYNX Technik AG warrants that the product will be free from defects in materials and workmanship for a period of three (3) years from the date of shipment. If this product proves defective during the warranty period, LYNX Technik AG at its option will either repair the defective product without charge for parts and labor, or will provide a replacement in exchange for the defective product.

In order to obtain service under this warranty, customer must notify LYNX Technik of the defect before expiration of the warranty period and make suitable arrangements for the performance of service. Customer shall be responsible for packaging and shipping the defective product to the service center designated by LYNX Technik, with shipping charges prepaid. LYNX Technik shall pay for the return of the product to the customer if the shipment is within the country which the LYNX Technik service center is located. Customer shall be responsible for payment of all shipping charges, duties, taxes and any other charges for products returned to any other locations.

This warranty shall not apply to any defect, failure, or damage caused by improper use or improper or inadequate maintenance and care. LYNX Technik shall not be obligated to furnish service under this warranty a) to repair damage resulting from attempts by personnel other than LYNX Technik representatives to install, repair or service the product; b) to repair damage resulting from improper use or connection to incompatible equipment; c) to repair any damage or malfunction caused by the use of non LYNX Technik supplies; or d) to service a product which has been modified or integrated with other products when the effect of such modification or integration increases the time or difficulty servicing the product.

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