

▶ VAB746 Video/Audio/Gigabit Ethernet

DESCRIPTION

Radiant's new VAB746 series is targeted for point to point requirements for both HDTV and Standard NTSC signals while providing an optional 10/100/1000 Gigabit Ethernet or Fibre Channel interface.

This system combines HDTV, SDI or NTSC signals with an optional Gigabit Ethernet interface onto one fiber for transmission between the studio and the CATV Headend or other common broadcast locations. The system will also convert ASI to NTSC in both directions.

The standard product combines one channel of each (NTSC, PAL or SDI + DVB) onto one single mode fiber for transmission distances of 100 Km or more. A 10/100/1000 Mbps Ethernet or Fibre Channel may be optionally added. The signals are optically combined onto one fiber; the standard NTSC signal meets RS250 Short Haul Specifications. Other type of HDTV signals can also be included— SMPTE 259 or 310.

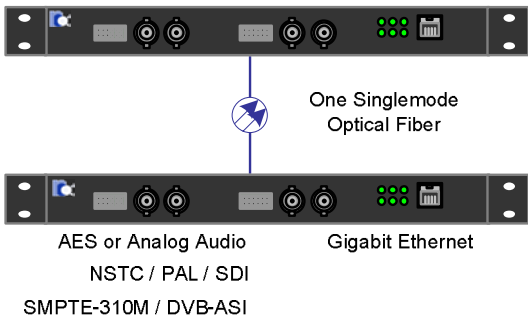
BENEFITS

- ▶ One fiber transmission
- ▶ Gigabit Ethernet or Fibre Channel Option
- ▶ Point to Point Broadcast applications back to studio with 2 way signals

FEATURES

- ▶ Combines DVB + NTSC/SDI Video/Audio and Gigabit Ethernet onto one single mode fiber
- ▶ Meets Short Haul specifications
- ▶ Options for DWDM Systems (ITU Grid)

Radiant 746: Video/Audio/Gigabit Ethernet



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6/2005

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SPECIFICATIONS

SDI Video

Signal Format: SMPTE-244M / IEC 61179
 Signal Bandwidth: 270 Mbps
 Impedance: 75 Ohms
 SDI + Embedded AES OK? YES

RS250 Short Haul Video

Type: 12-bit Digitally Encoded Video
 Video Bandwidth: 8 MHz
 SNR/CTN: > 67 dB
 I/O Level: 75 Ohms

Audio

Type: 24-bit Digitally Encoded Audio
 Input/Output Signal Level: up to +20 dB (20V p-p) Max.
 Input/Output Impedance: 10 k or 600 Ohms
 Bandwidth: 20 Hz to 24 kHz

DVB/SDI

Signals: SMPTE 259, 310
 Bandwidth: 270 Mbps
 Impedance: 75 ohms

Optical

Wavelength: 1310/1550 nm, CWDM, DWDM
 Number of Fibers: 1
 Power Budget: see table below

General Characteristics

Power: 15W @ 90 to 240V AC
 Operating Temp: -20° to 50° C
 Storage Temp: -40 to 85° C
 Size: 17.0" W x 13.0D x 1.75" H

OPTICAL POWER BUDGET

FIBER	WAVELENGTH	OPTICAL BUDGET	DISTANCE
SINGLEMODE	1310/1550 nm	18 db	50 km
SINGLEMODE	CWDM	25 db	100 km

Contact Factory for higher optical budgets and distances

ORDERING INFORMATION

PART NUMBER	DESCRIPTION
VAB746S-XY/G-T-UZW	Transmitter, Video/Audio/Gigabit Ethernet, 270 MB DVB
VAB746S-XY/G-R-UZW	Receiver, Video/Audio/Gigabit Ethernet, 270 MB DVB
VAB746S-XY/G-TR-UZW	Transceiver, Video/Audio/Gigabit Ethernet, 270 MB DVB
VAB746S-XY-TR-UZW	Transceiver, Video/Audio 270 MB DVB

Note:

- Specify X—Video Channel Type: S=SDI, N=NTSC, P=PAL
- Specify Y— Audio Channel, A=Analog, Dual Channel (4 total), D=Dual Digital Audio (AES)
- Specify G—Gigabit Ethernet Interface: T = 10/100/1000 BaseT, S= 1000 Base LX, L=1000 Base LX
- Specify Z—connector type: A—SC/APC, E—SC, B—FC, Z—FC/APC
- Specify W—wavelength: 6—1310/1550 nm, C—CWDM wavelengths, D—DWDM (ITU Grid) wavelengths.
- Maximum attenuation can be increased
- Single channel system is 1U high, multiple channel systems will be higher
- For other types of HDTV or SDI signals, contact factory
- For DWDM systems, contact factory

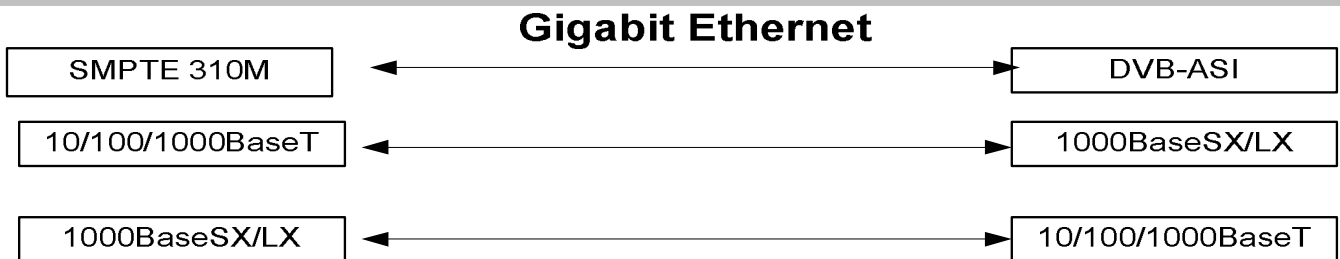
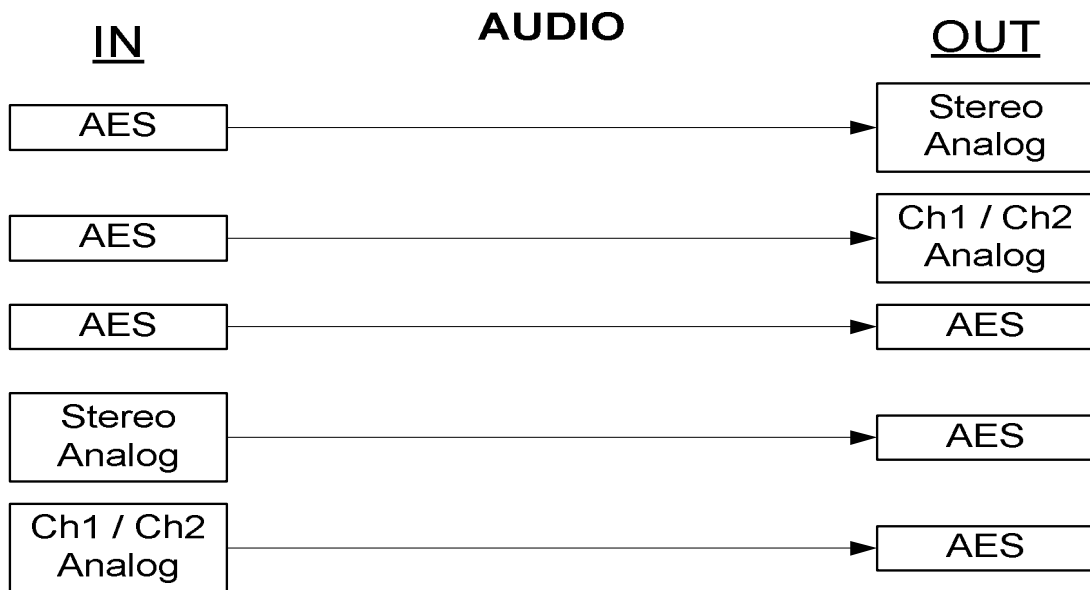


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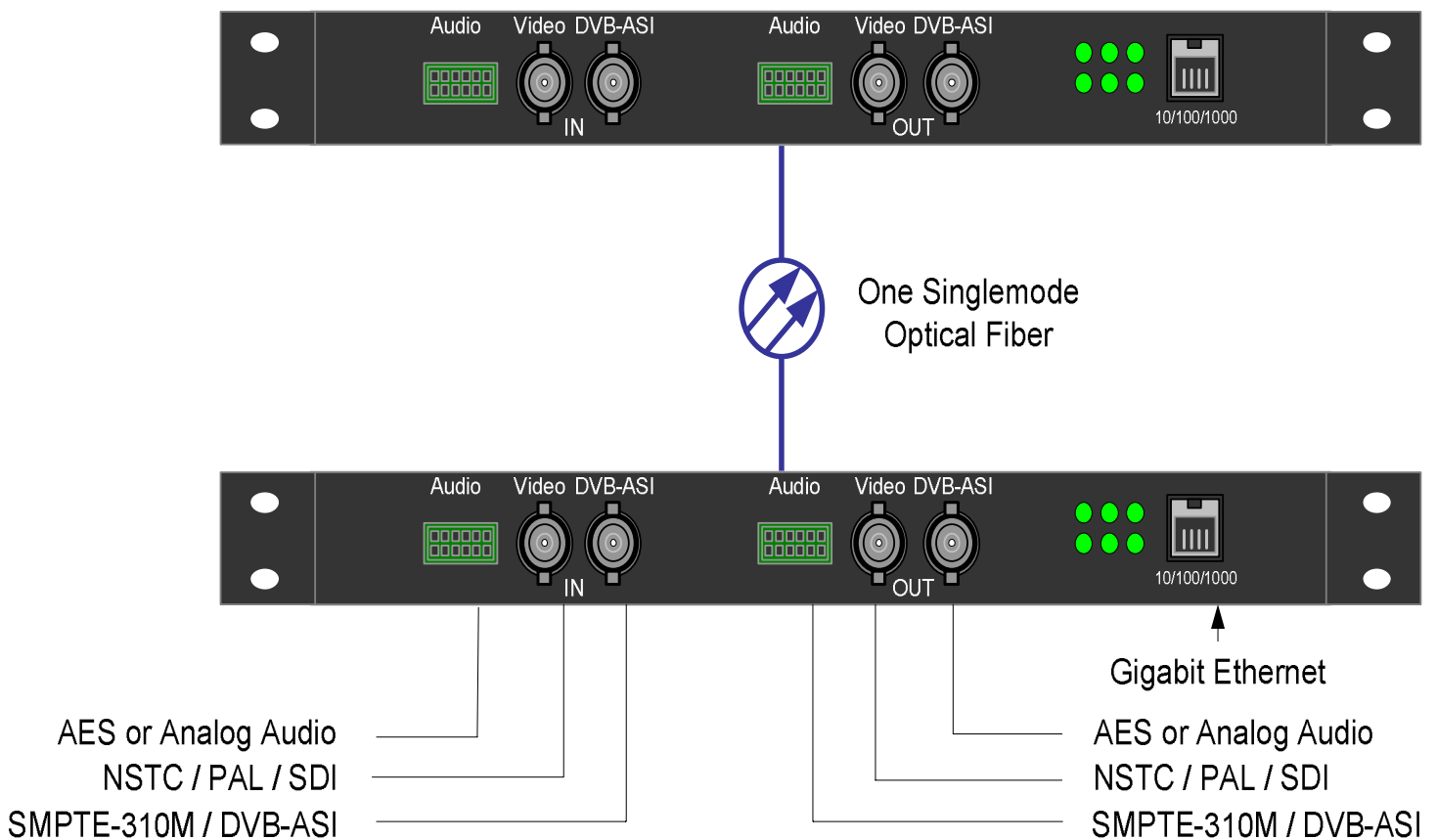
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▶ VAB746 Video/Audio/Gigabit Ethernet

Single Fiber Video / Audio / DVB-ASI / Gigabit Ethernet Transmission System

- * Bi-Directional Transmission on One Optical Fiber
- * Transcode between SDI Digital Video and NTSC or PAL
- * Transcode between AES Digital Audio and Analog Audio
- * Transcode between SMPTE-310M and DVB-ASI



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