



4600E

High Resolution Fiber Optic RGB/Sync Video Transmission Systems



“High Bandwidth RGB Video Transmission with Stereo Audio Option”



“High performance and affordable solutions for your high-bandwidth RGB video transmission.”

Applications

- Remote Workstation Video/Graphics Transmission
- Remote RGB Video Projection
- Digital Signage, Video Wall

Features

- Video Bandwidth up to 160MHz
- Requires only 3 Fibers for RGB and Sync Transmission
- Accommodates H+V Sync, Composite Sync, Sync on Green
- Option with RGB/Sync and Stereo Audio Transmission
- Mouse, Keyboard, and Stereo Audio Option Available

One Singlemode Fiber Solution Available

The 4600E Series is a high-performance and affordable High Resolution Fiber Optic RGB Video Transmission System. The standard 4600E system is designed to transmit high-resolution RGB/sync video over three multimode or singlemode fibers with video bandwidth up to 160MHz per color. Transmission of up to UXGA (1600 x 1200) video resolution is supported. Option with one stereo audio is also available. In addition to RGB/sync video transmission, the 4600E “AKM” option allows for the transmission of standard mouse, keyboard, and stereo audio over two (2) additional fibers for feature rich, remote multimedia presentations. Many versions of optical transmitter and receiver combinations are available to address different distance requirements.

With just three (or four) fibers required to connect the 4600E for all RGB video (RGB video plus stereo audio) channels and sync signals, users enjoy trouble-free quick setup and ease of use. The 4600E supports most popular sync formats, including sync on green, composite sync, and external H + V sync.

The 4600E has rugged, standalone, and compact packaging. The unit contains HD15 VGA connectors for video hookup and ST-type connectors for multimode, or FC-connectors for singlemode, fiber optical connection. They are also easily monitored by separate LED indicators for power, optical link, and channel activity. The standalone units are powered by +12 VDC.

The 4600E design is capable of addressing a variety of non-standard configurations. Contact us to discuss your custom, OEM/private brand and high volume requirements.



Doing More With One Fiber



4600E

Multimedia Transmission Systems



High Resolution Fiber Optic RGB/Sync Video Transmission Systems

RGB Video

Bandwidth	Up to 160MHz
Video Level	1.0 Vp-p @ 75 Ohms (0.7 V without sync)
Fresh Rate	Up to 60 Hz (1600 x 1200) Up to 75 Hz (1280 x 1024, 1204 x 765, 800 x 600, 640 x 480)
Connector	HD15 VGA

Audio

Channel Capacity	2
Operating Mode	Balanced/Unbalanced (Stereo Audio) Unbalanced (AKM)
Input/Output Impedance	600/600 Ohms (Stereo Audio) 10k/600 Ohms (AKM)
Max. Input/Output Level	+10 dBm @ 600 Ohms (Stereo Audio) 5 Vp-p @ 10k Ohms (AKM)
Magnitude Freq. Response	20Hz to 20kHz @ -3dB
SNR (Weighted)	80dB @ 1k Hz, +10 dBm (Stereo Audio) 70dB @ 1kHz, 5 Vp-p (AKM)
Connector	Terminal Block (Stereo Audio) RCA (AKM)

Mouse Port

Interface	Industrial Standard RS-232
Connector	6-pin mini Din/PS2 or DB9

Keyboard Port

Compatibility	Industrial Standard Keyboards
Signal Level	TTL, 0-5V
Connector	6-pin mini Din/PS2

Optical

Fiber Type	Multimode and Singlemode
Number of Fibers	3 (RGB/Sync Video Only) 4 (RGB/Sync/Stereo Audio) 5 (RGB/Sync Video with Keyboard/Mouse/Audio)

Optical (continued)

Wavelength	1310 and/or 1550 nm
Fiber Optic Connector	ST (Multimode) FC (Singlemode)

Physical

Dimension: (H x W x D)	
RGB/Sync Video Only	1.72" x 4.36" x 8.75"
RGB/Sync/Stereo Audio	1.72" x 8.58" x 12.00"
RGB/Sync Audio/Keyboard/Mouse	1.72" x 8.58" x 12.00"
Card-cage Plug-in Card	5.24" x .094" x 11.6"
Power Level	
RGB/Sync Video Only	+12VDC @ 1A
RGB/Sync/Stereo Audio	+12VDC @ 1.5A
RGB/Sync with Audio/Keyboard/Mouse	90 - 240VAC @ 1.5A
Operating Temperature	0 to +50°C
Humidity	0 to 95% RH, non-condensing
Status Indicators	Power, Optical Link, Video Activity

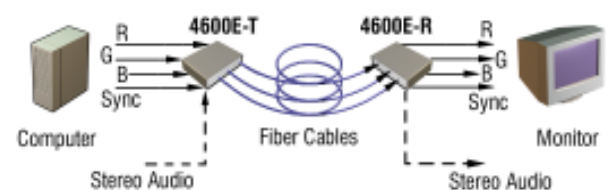
Typical Power Budget and Transmission Distance

Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	8	2	1.2
Singlemode Fiber	8	20	12.5

(1) These are typical values for the 4600E Series. The actual values may vary.

(2) These are typical distance coverage figures. The maximum distance coverage may be greater than these typical numbers, depending on fiber type, fiber bandwidth, connector splicing losses, chromatic dispersion, environmental factors, etc.

Application



Doing More With One Fiber

Subject to continued product enhancement, we reserve the right to change the above specifications and description without notice.

