



# 4601E

**High Resolution Fiber Optic RGB/Sync Video Transmission Systems**



**“High Bandwidth RGB Video Transmission Over One Singlemode Fiber 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 1 Fiber 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

The 4601E Series is a high-performance and affordable High Resolution Fiber Optic RGB Video Transmission System. The standard 4601E system is designed to transmit high-resolution RGB/sync video over one singlemode fiber 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 4601E “AKM” option allows for the transmission of standard mouse, keyboard, and stereo audio for feature rich, remote multimedia presentations. Many versions of optical transmitter and receiver combinations are available to address different distance requirements.

With just one fiber required to connect the 4601E for all RGB video channels and sync signals, as well as stereo audio, users enjoy trouble-free quick setup and ease of use. The 4601E supports most popular sync formats, including sync on green, composite sync, and external H + V sync.

The 4601E has rugged, standalone, and compact packaging. The unit contains HD15 VGA connectors for video hookup and one 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 4601E 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** plus



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High Resolution Fiber Optic RGB/Sync Video Transmission Systems

Multimedia 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)
Gray Scale Linear Distortion	< 2%
Pixel Intensity Distortion	< 2%
Linearity	+/- 1.1%
SNR (Weighted)	>55dB
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

## Physical

Dimension: (H x W x D)	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

## Optical

Fiber Type	Singlemode
Number of Fibers	1 (RGB/Sync Video Only) 1 (RGB/Sync/Stereo Audio) 3 (RGB/Sync with Keyboard/ Mouse/Audio)
Wavelength	1310 and/or 1550 nm
Fiber Optic Connector	FC (Singlemode)

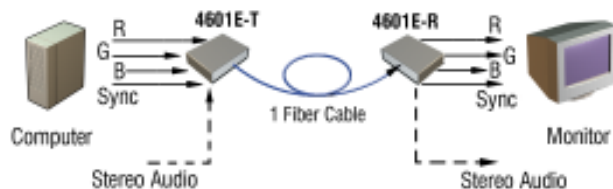
## Typical Power Budget and Transmission Distance

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

(1) These are typical values for the 4601E 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 *plus*

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

