



# 1100E

Fiber Optic HD-SDI Digital Video Transport Systems



“SMPTE-292M HD”  
 “SMPTE-259M SDI”  
 “SMPTE-310M ATSC”  
 “DVB-ASI”  
 “with options to support  
 embedded digital/analog audio and  
 analog video conversion”



**“High performance and affordable solutions for your broadcast HD-SDI video transmission.”**

### Applications

- Remote HD-SDI Video Transport
- ENG/EPG HD-SDI Video Transmission
- Pre-production and Post-production HD-SDI Video Links

### Features

- Transport Multi-rate HD-SDI Digital Video Over Fiber
- Option with HD-SDI Reclocking
- Reliable Transmission Over Multimode or Singlemode Fiber
- Video Pathological Test Code Compliant
- 1 Fiber Solution also Available (WDM)**
- CWDM Optics Available**
- DVB-ASI Option Available**

The 1100E Series is a high performance, yet affordable, Fiber Optic HD-SDI Digital Video Transport System. The standard 1100E system is designed to transport one (1) channel SMPTE-292M HD or SMPTE-259M serial digital video signal over long distance through either singlemode or multimode fiber. Many versions of optical transmitter and receiver combinations are available to address different distance requirements.

Due to the use of advanced digital fiber optic transmission technology, no user adjustments are required in the 1100E system, enabling quick setup and trouble-free operation with standard non-reclocking configuration. The 1100E can handle ATSC, SDI, DVB-ASI, HD, and many other video formats. One can also choose the reclocking configuration which provides SMPTE-292M HD, SMPTE-259M SDI and DVB-ASI signal regeneration.

The 1100E comes with two packaging options: a rugged, standalone, and compact unit, or a plug-in card for a card cage system. Panel connectors are provided for digital HD-SDI video (BNC connector) and fiber connection (FC-type for the singlemode version, or ST-type for the multimode version). The 1100E can be easily monitored by front panel LED indicators for channel activity. Transmitter units provide 1 loop-through output for monitoring, and the receiver provides 2 output for monitoring and recording.

The 1100E design is capable of addressing a variety of non-standard configurations. Contact us to discuss your custom, OEM/private brand and high volume requirements.



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## Broadcast Transmission Systems



### Digital Video

Signal Format	SMPTE-292M HD-SDI or SMPTE-259M SDI Digital Video and many others
Data Rate	143 Mbps to 540 Mbps, 1.5 Gbps
Signal Level	800mVp-p +/- 10%
Return Loss	> 15 dB
Connector	75 Ohm BNC

### 1100E Edge Support\*

Audio	Embedded or De-embedded Digital/Analog Audio
Video Conversion	Analog Component Video Conversion

\*Please refer to 1100E-Edge data sheet for detailed technical specifications.

### Physical

Dimension: (H x W x D)	
Standalone unit	1.72" x 4.36" x 8.75"
Card-cage plug-in card	5.24" x 0.94" x 11.6"
Power Level	+12 VDC @ 1.0 A
Operating Temperature	0 to +50°C
Humidity	0 to 95% RH, non-condensing
Status Indicators	Power, Optical Link, Signal Detect, Reclocking

### Optical

Fiber Type	Multimode and Singlemode
Number of Fibers	2 or 1
Wavelength	1310 and/or 1550 nm
Fiber Optic Connector	ST (Multimode) FC (Singlemode)

### Optical

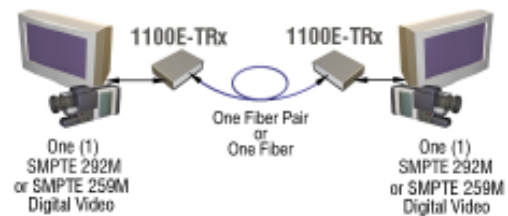
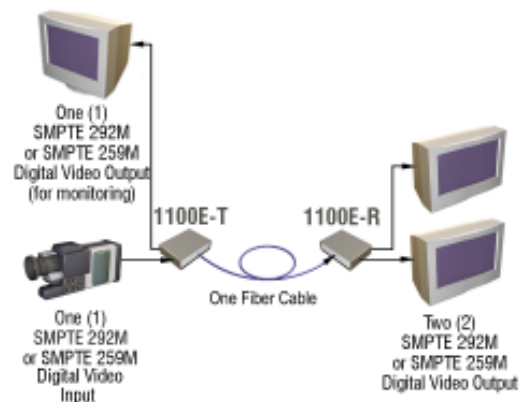
#### Typical Power Budget and Transmission Distance

Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	14	1	0.6
Singlemode Fiber	14	20	12.50
Singlemode Long Distance	16	40	25

(1) These are typical values for the 1100E 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.

