



1-8 Channel Flexible HD-SDI, Analog Video / Audio, RS Data, Ethernet Optical MUX

TECHNICAL DATASHEET



Flexible 1-8 channel optical multiplexer for SDI, analog video/audio, RS data and Ethernet.



Front panel - original product image

Model Number

F-SUPERMUX-8

Manufacturer: Thor Fiber

Primary Purpose: The Thor Fiber F-SUPERMUX-8 is a modular optical multiplexing platform for transporting mixed professional signals over fiber, including SD/HD/3G-SDI, DVB-ASI, analog video, analog or AES/EBU audio, RS data, contact closure, and 10/100/1000 Ethernet. It is designed for flexible broadcast, security, campus, transport, and control-room applications where many signal types must be combined over a fiber path.

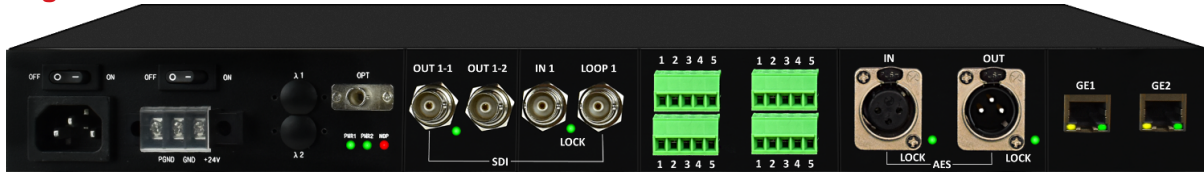
Key Specifications

Spec Category	Extracted Value
Model Number	F-SUPERMUX-8
Platform	1-8 channel flexible optical MUX platform in 1RU, 19 in. rackmount chassis
Supported Signals	SD/HD/3G-SDI, DVB-ASI, analog CVBS video, analog audio, AES/EBU audio, RS232/422/485, contact closure, and Gigabit Ethernet
SDI Standards	SMPTE-424M 3G-SDI, SMPTE-292M HD-SDI, SMPTE-259M SD-SDI
SDI Bit Rates	2970 Mb/s, 1485 Mb/s, and 270 Mb/s auto-adaptive
SDI Features	SDI loop out or dual SDI output selectable; integrated SDI reclocker and cable equalizer
Ethernet	RJ45 10/100/1000 Mb/s, auto-negotiation, auto MDI/MDIX
Data / Aux	Phoenix terminal groups configurable for audio, RS232, RS422, RS485 and contact closure
Optical Interface	Optional SC / FC / ST-PC connector; default transmission distance 40 km
Power Options	100-240 VAC, 36-72 VDC, or 18-36 VDC options; dual power redundancy available
Mechanical	482 x 44 x 250 mm, 1RU rackmount
Environment	Operating -30C to +60C; storage -40C to +85C; <=95% humidity, non-condensing

Core Features

- Flexible Signal Mix: Modular platform can combine SDI, ASI, analog video/audio, RS data, contact closure and Ethernet.
- Broadcast SDI Support: Handles SD/HD/3G-SDI with reclocking and cable equalization.
- Ethernet Extension: Supports 10/100/1000 Mb/s RJ45 Gigabit Ethernet transport.
- Auxiliary Service Ports: Phoenix terminal groups can be configured for RS232, RS422, RS485, audio or contact closure.
- Optical Flexibility: Supports FC, SC or ST-PC optical connectors by request.
- Rackmount Design: Compact 1RU 19 inch chassis for professional rack installation.
- Status Monitoring: Optical, SDI, power and Ethernet indicators simplify troubleshooting.
- Redundant Power Options: AC and DC power options can be selected for system resilience.

Product Images



Rear panel / module interface image - original product image

Target Applications

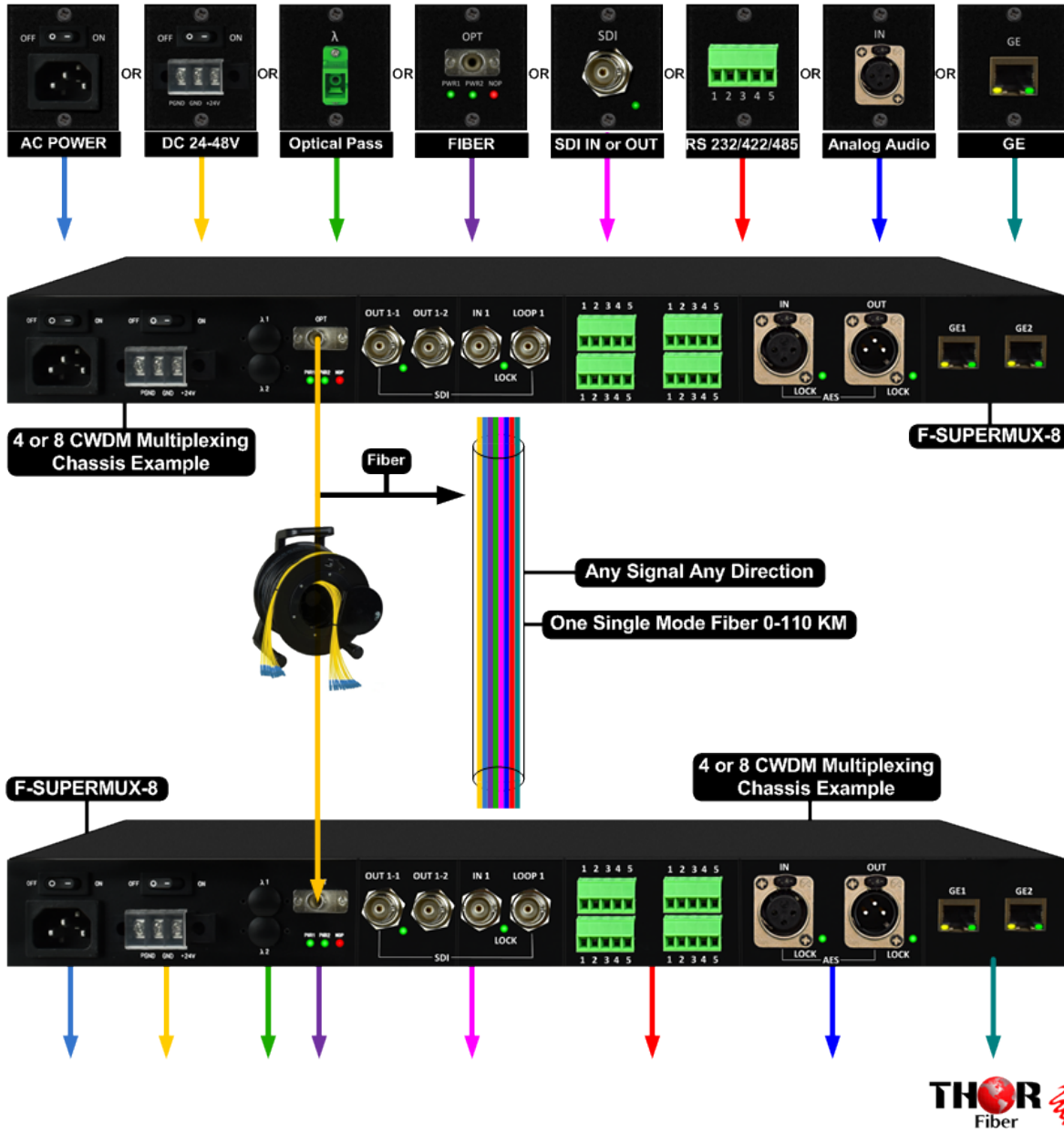
- Broadcast studio fiber transport
- High-definition video conference links
- OB truck and remote production
- Traffic / intelligent transportation systems
- Campus and venue AV signal distribution
- Control room to remote site interconnects
- Security and public safety systems
- Mixed signal optical transport over one fiber path

Additional Product Information

Item	Extracted Value
Warranty	2 year warranty
Optical Distance	40 km default; longer distance available by request
Working Temperature	-30C to +60C
Storage Temperature	-40C to +85C
Relative Humidity	<=95%, no condensation
Power	100-240 VAC or DC power options depending on configuration

Application Drawing

1~8 Channel flexible HD-SDI, Analog Video/ Audio, RS Data, Ethernet Optical MUX



Model / Module Selection

Model	Description	Notes
F-SUPERMUX-1 to F-SUPERMUX-8	Flexible optical MUX platform; X = 1 to 8 multiplexed signals / CWDM wavelengths	Custom mix of SDI, ASI, audio, RS data, contact closure and Ethernet
SDI / ASI Modules	3G/HD/SD-SDI input or output modules; DVB-ASI support	BNC 75 ohm, reclocking / equalization
GE Modules	Gigabit Ethernet transport over fiber	RJ45 10/100/1000 Mb/s
AUX Modules	Audio, RS232, RS422, RS485 or contact closure options	Phoenix terminal or XLR depending on module

Technical Notes

- All specifications are subject to change without notice.
- Actual configuration depends on selected modules, signal direction, optical wavelengths, connectors and power options.
- Use optical attenuation for very short fiber test links when required to protect optical modules.
- QR code links directly to the product page for latest manuals and documentation.