



# kramer

## MC3-2F-2F

4K60 Fiber Optic 2xIN + 2xOUT Card

| Fiber Optic



MC3-2F-2F is a high-performance two-port input and two-port output fiber card which is part of the compatible modular matrices multi-signal cards family. MC3-2F-2F can flexibly occupy any of the matrix card slots. Its input signals are independently switched by the modular matrix to any of the matrix output ports, and any matrix input signals are independently switched to its output ports

### FEATURES

**High Resolution Audio–Visual Experience** - Modular matrix card supports high 4K60 4:4:4 HDMI signal distribution from and towards any input and output port of the modular matrix. Near-zero latency video chroma sub-sampling conversion technology is employed to auto-adapt above 10G HDMI signals to 10G optical link signal data-rate

**Flexible Standard Fiber Extender** - HDMI fiber extender for ultra-reach signals distribution over either multi-mode or single-mode optical fiber infrastructures, using Kramer SFP+ pluggable optical modules (multi-mode SFP+ included).

Note: To ensure specified performance, support, and warranty of this product, use only Kramer's certified hi-performance SFP+ pluggable optical modules

**Multi-drop Signal Distribution** - Use optical splitters to extend the input signals from a single transmitter to multiple receivers, for displaying the same content on multiple display devices using optical splitting only, with no need for AV distribution amplifiers

**HDMI Signal Extension** - HDCP 2.2 compliant and supports up to 18G (6G per channel) data rate, LPCM 7.1, Dolby True HD, and DTS-HD as specified in HDMI 2.0

**Bidirectional RS-232 Extension** - Serial interface data flows end-to-end in both directions, to enable data transmission and control of devices

**I-EDIDPro™ Kramer Intelligent EDID Processing™** - Intelligent EDID handling, processing and pass-through algorithm that ensures Plug and Play operation for HDMI source and display systems

**Cost-Effective Maintenance** - Fiber link connection LED indications facilitate easy local troubleshooting



## TECHNICAL SPECIFICATIONS

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Inputs	2 Fiber Optic On LC connectors
Outputs	2 Fiber Optic On LC connectors
Extension Line	Optical Fiber Multi-mode (MM) or single-mode (SM) Optical Module Kramer 10Gbps SFP+ IEEE 802.3ae compliant modules (MM is included)
Multi-mode Line	Compliance G.651.1 OFNR fiber Max Reach over OM3 MM Fiber 3km (1.8 miles) Note When using Kramer optical modules
Single-mode Line	Compliance: G.652D OFNR fiber Max Reach over OS1 SM Fiber: 33km (20.5 miles) Note When using Kramer optical modules
STANDARDS COMPLIANCE	Laser Safety Compliance Class 1  SFP Regulatory Certifications FDA CDRH 21 CFR 1040 and Laser Notice No. 50, UL and CUL EN60950-2:2007, RoHS6, EMC EN 55022 and EN 55024, IEC 62368-1 and IEC 60825-1 and -2
Video	Max Data Rate 18Gbps (6G per channel)  Max Resolution 4K@60 (4:4:4)  Max Switching Time Between Inputs 6.5 seconds Note: Assuming typical display with up to 3sec delay time contribution  Output Transition on Switching Black/Blue screen  HDMI Compliance 4K as specified in HDMI 2.0b  Content Protection HDCP 2.2
Extended RS-232	Baud Rate 9600 to 115200
Environmental Conditions	Operating Temperature: 0° to +40°C (32° to 104°F)  Storage Temperature: -40° to +70°C (-40° to 158°F)  Humidity: 10% to 90%, RHL non-condensing
Regulatory Compliance (Standards Compliance)	Safety: CE, UL  Environmental: RoHs, WEEE
Product Dimensions	25.50cm x 13.00cm x 2.00cm (10.04" x 5.12" x 0.79" ) W, D, H
Product Weight	0.3kg (0.6lbs) approx
Shipping Dimensions	29.20cm x 16.50cm x 6.00cm (11.50" x 6.50" x 2.36" ) W, D, H
Shipping Weight	0.4kg (0.9lbs) approx