Media Converters for Every Combination

The comprehensive media converter portfolio for serial, Ethernet, and fiber connections

Our Media Converters Offer These Benefits

- A wide selection of serial, Ethernet, and fiber conversions
- Industrial-grade design that endures various industrial environments
- Both standalone and modular designs that make deployment easy and flexible

Choose the Media Converter That Works for You

Media converters significantly ease your daily operations in industrial applications. Moxa's media converters offer versatile solutions that include serial-to-serial, serial-to-fiber, fieldbus-to-fiber, and Ethernet-to-fiber, providing you a wide selection for various requirements.

Scenario 1

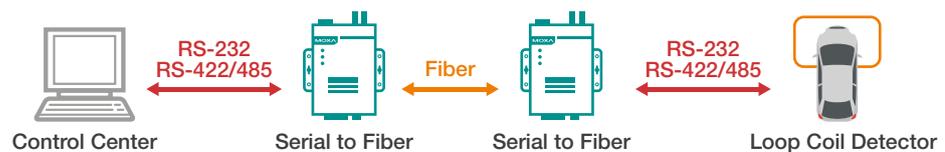**Do you want to transfer your RS-232 devices to an RS-422/485 interface?**

Control Center — RS-232 — RS-232 to RS-422/485 — RS-422/485 — Power Meter

Moxa's Offering
Standalone Serial-to-serial Converters

Model	TCC-80/80I	TCC-100/100I	TCC-120/120I
Interface A	RS-232	RS-232	RS-422/485
Interface B	RS-422/485	RS-422/485	RS-422/485
Port Power	√	-	-
Repeater	-	-	√
Serial Isolation	2 kV (TCC-80I)	2 kV (TCC-100I)	2 kV (TCC-120I)
Serial Surge	-	1 kV	1 kV

Scenario 2

Do you want to extend the transmission distance of your serial devices?

Control Center — RS-232 RS-422/485 — Serial to Fiber — Fiber — Serial to Fiber — RS-232 RS-422/485 — Loop Coil Detector

Moxa's Offering
Standalone Serial-to-fiber Converters

Model	TCF-90	TCF-142	ICF-1150/1150I
Interface A	RS-232	RS-232/422/485	RS-232/422/485
Interface B	100BaseFX, fiber (single-mode or multi-mode)		
Fiber Connector	ST connector	ST or SC connector	ST or SC connector
Serial Isolation	-	-	2 kV (ICF-1150I)
Serial Surge	-	-	1 kV
Fiber Ring	-	√	√
Fiber Distance*	Multi-mode: 5 km Single-mode: 40 km		
Industrial Certifications	-	-	C1D2, ATEX, IECEx

*The distance is computed based on the fiber cable, link budget (dB), and other factors.

Scenario 3

Do you want to extend the transmission distance of your PROFIBUS or CAN devices?

Control Center ← PROFIBUS/CAN → Fieldbus to Fiber ← Fiber → Fieldbus to Fiber ← PROFIBUS/CAN → PROFIBUS/CAN-based PLC
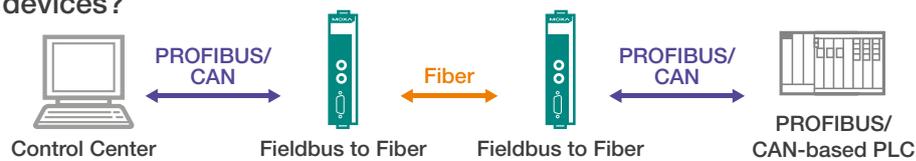
Moxa's Offering
Standalone Fieldbus-to-fiber Converters

Model	ICF-1170I	ICF-1171I	ICF-1180I	ICF-1280I
Interface A	ISO 11898-2, terminals	ISO 11898-2, terminals	PROFIBUS DP (DB9 female)	PROFIBUS DP (DB9 female)
Interface B	100BaseFX, fiber (multi-mode)	100BaseFX, fiber (single-mode or multi-mode)		
Fiber Connector	ST connector	ST connector	ST connector	ST connector
Serial Isolation	2 kV	2 kV	2 kV	2 kV
Serial Surge	1 kV	2 kV	2 kV	2 kV
Fiber Ring	-	-	-	√
Fiber Distance*	2 km	Multi-mode: 2 km Single-mode: 40 km	Multi-mode: 4 km Single-mode: 45 km	Multi-mode: 4 km Single-mode: 45 km
Industrial Certifications	-	-	C1D2, ATEX, IECEx, DNV	

*The distance is computed based on the fiber cable, link budget (dB), and other factors.

Scenario 4

Do you want to extend the transmission distance of your Ethernet devices?

Control Center ← Ethernet → Ethernet to Fiber ← Fiber → Ethernet to Fiber ← Ethernet → IP Camera
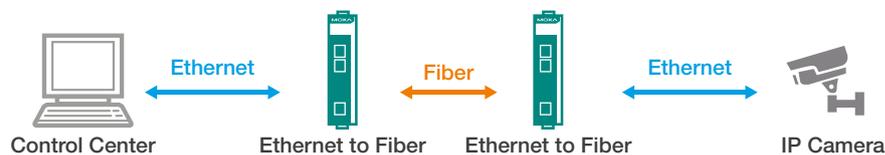
Moxa's Offering
Standalone Ethernet-to-fiber Converters

Model	IMC-21	IMC-21A	IMC-21GA	IMC-101	IMC-101G	IMC-P101	PTC-101
Interface A	10/100BaseT(X), RJ45	10/100BaseT(X), RJ45	10/100/1000BaseT(X), RJ45	10/100BaseT(X), RJ45	10/100/1000BaseT(X), RJ45	10/100BaseT(X), RJ45	10/100BaseT(X), RJ45
Interface B	100BaseFX, fiber (single-mode or multi-mode)		1000BaseSX/LX, fiber (single-mode or multi-mode) or 100/1000BaseSFP slot	100BaseFX, fiber (single-mode or multi-mode)	1000BaseSFP slot	100BaseFX, fiber (single-mode or multi-mode)	
Fiber Connector	ST or SC connector	ST or SC connector	SC or SFP connector	ST or SC connector	SFP connector	ST or SC connector	ST, SC, or LC connector
Port Alarm	-	-	-	√	√	√	√ (LV model)
Power Alarm	-	-	-	√	√	√	√ (LV model)
PoE+	-	-	-	-	-	√	-
Fiber Distance*	Multi-mode: 5 km Single-mode: 40 km		Based on SFP module	Multi-mode: 5 km Single-mode: 40 km or 80 km	Based on SFP module	Multi-mode: 5 km Single-mode: 40 km	
Industrial Certifications	-	-	-	C1D2, ATEX, IECEx, DNV	C1D2, ATEX, IECEx	-	IEC 61850-3

*The distance is computed based on the fiber cable, link budget (dB), and other factors.

Do you want to extend the transmission distance of your mass devices?

Control Center — Ethernet — Ethernet Switch — Ethernet — Chassis Media Converters — Fiber — Ethernet — IP Camera; RS-232 RS-422/485 — Standalone Media Converters — PLC
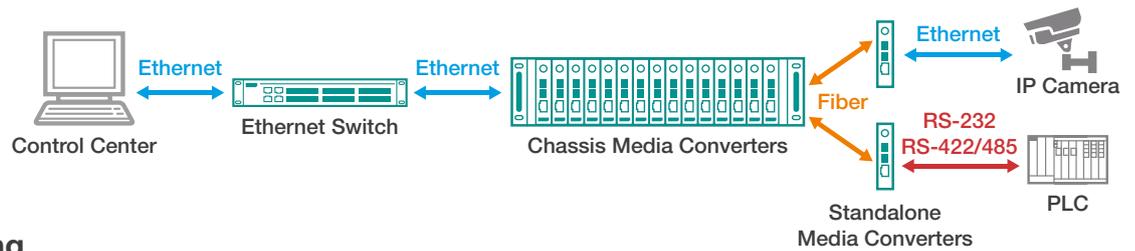
Moxa's Offering

Modular Managed Chassis Media Converters

Fanless Chassis Media Converters
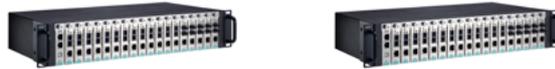
Model	TRC-2190-AC	TRC-2190-DC-48V
Number of Slots (for slide-in modules)	18	18
Input Voltage	100 to 240 VAC	48 VDC
Power Inputs	Dual power inputs with redundancy*	

*Note: The second power supply must be purchased separately.

Chassis Slide-in Modules

Model	CSM-400-1213	CSM-400-1214	CSM-400-1218	CSM-400-1224	CSM-400-1225
Interface A	10/100BaseT(X), RJ45	10/100BaseT(X), RJ45	10/100BaseT(X), RJ45	10/100BaseT(X), RJ45	10/100BaseT(X), RJ45
Interface B	100BaseFX, fiber (multi-mode)	100BaseFX, fiber (multi-mode)	100BaseFX, fiber (single-mode)	100BaseFX, fiber (single-mode)	100BaseFX, fiber (single-mode)
Fiber Connector	ST connector	SC connector	SC connector	WDM-A SC connector	WDM-B SC connector
Fiber Distance*	5 km	5 km	40 km	20 km	20 km
Port Alarm	√	√	√	√	√
Power Alarm	√	√	√	√	√

*The distance is computed based on the fiber cable, link budget (dB), and other factors.

Modular Unmanaged Chassis Media Converters

Fanless Chassis Media Converters

Model	TRC-190-AC	TRC-190-DC-48
Number of Slots (for slide-in modules)	19	19
Input Voltage	100 to 240 VAC	48 VDC
Power Inputs	Dual power inputs with redundancy*	

*Note: The second power supply must be purchased separately.

Chassis Slide-in Modules

Model	CSM-G200-1221	CSM-200	TCF-142-RM
Interface A	100/1000BaseT(X), RJ45	10/100BaseT(X), RJ45	RS-232/422/485
Interface B	100/1000BaseSFP slot	100BaseFX, fiber (single-mode or multi-mode)	100BaseFX, fiber (single-mode or multi-mode)
Fiber Connector	SFP connector	ST or SC connector	ST or SC connector
Fiber Distance*	Based on SFP module	Multi-mode: 5 km Single-mode: 40 km	Multi-mode: 5 km Single-mode: 40 km

*The distance is computed based on the fiber cable, link budget (dB), and other factors.

MOXA®