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

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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 extend the transmission distance of your Ethernet devices?

Control Center → Ethernet → Ethernet to Fiber → Fiber → Ethernet to Fiber → Ethernet → IP Camera
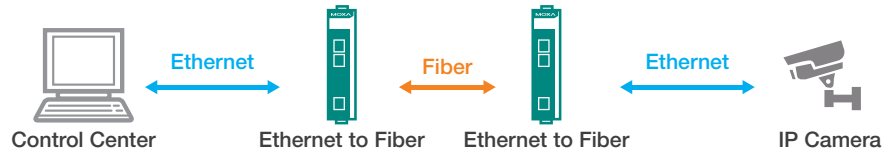
Moxa Offers

Standalone Ethernet-to-fiber Converters

Model	IMC-21	IMC-21A	IMC-21GA	IMC-101	IMC-101G	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
Interface B	100BaseFX, fiber (single-mode or multi-mode)	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 Connection	ST or SC connector	ST or SC connector	SC or SFP connector	ST or SC connector	SFP 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	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	-	-	-	CID2, ATEX, IECEx, DNV	CID2, ATEX, IECEx	IEC 61850-3

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

Scenario 2

**Do you want to extend the transmission distance and power up your Ethernet device without extra power cables?**

Control Center → Ethernet → Ethernet to Fiber → Fiber → Ethernet to Fiber → Power over Ethernet → PTZ Camera
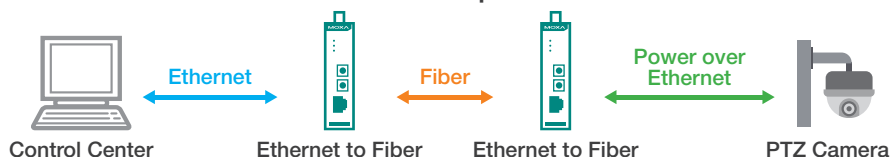
Moxa Offers

Standalone PoE Ethernet-to-fiber Converters

Model	IMC-P21A-G2	IMC-P21GA-G2	IMC-P101
Interface A	10/100BaseT(X), RJ45	10/100/1000 BaseT(X), RJ45	10/100BaseT(X), RJ45
Interface B	100BaseFX (single-mode or multi-mode)	100/1000 BaseSX/LX, 100/1000 BaseSFP slot	100BaseFX (single-mode or multi-mode)
Fiber Connection	ST or SC connector	SFP or SC connector	ST or SC connector
PoE Type	802.3at PoE+	802.3at PoE+	802.3at PoE+
Power Budget	36W	36W	30W
Dual Power Inupt	√	√	√
Fiber Distance	Multi-mode: 5 km Single-mode: 40 km	Multi-mode: 0.5 km Single-mode: 10 km SFP: Up to 80 km	Multi-mode: 5 km Single-mode: 40 km

Do you want to extend the transmission distance of your a large number of devices?
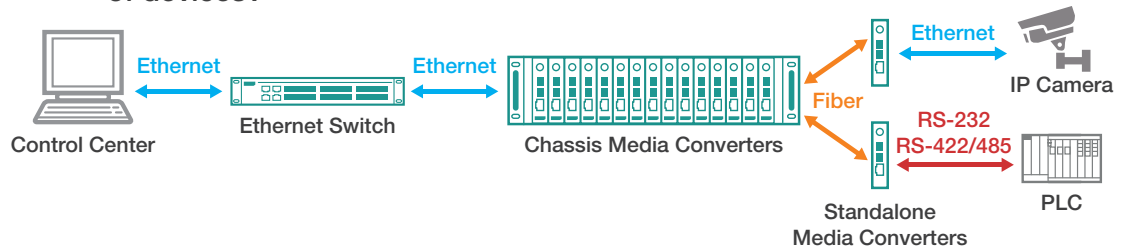
Moxa Offers

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.
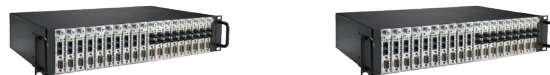
Chassis Slide-in Modules

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 Connection	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 Fiber 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 Fiber Distance is computed based on the fiber cable, link budget (dB), and other factors.

Scenario 4

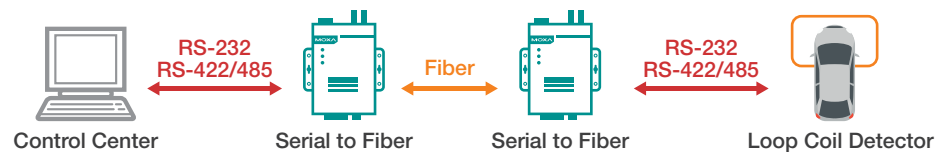Do you want to transfer your RS-232 devices to an RS-422/485 interface?

RS-232 ←→ RS-232 to RS-422/485 ←→ RS-422/485

Control Center   RS-232 to RS-422/485   Power Meter
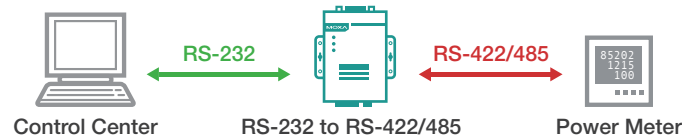
Moxa Offers
Standalone Serial-to-serial Converters

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 5

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

RS-232 / RS-422/485 ←→ Serial to Fiber ←→ Fiber ←→ Serial to Fiber ←→ RS-232 / RS-422/485

Control Center   Serial to Fiber   Serial to Fiber   Loop Coil Detector

Moxa Offers
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 Connection	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	-	-	CID2, ATEX, IECEx

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

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
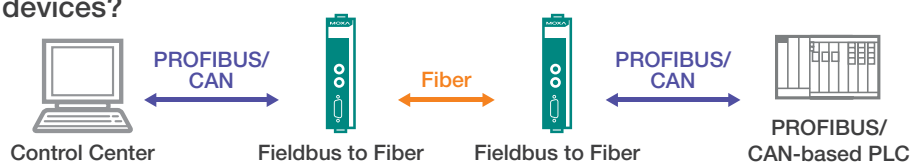
Moxa Offers

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 Connection	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	-	-	CID2, ATEX, IECEx, DNV	

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

MOXA®

Your Trusted Partner in Automation

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things (IIoT). With 35 years of industry experience, Moxa has connected more than 102 million devices worldwide and has a distribution and service network that reaches customers in more than 85 countries. Moxa delivers lasting business value by empowering industries with reliable networks and sincere service. Information about Moxa's solutions is available at www.moxa.com.

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