

Serial-to-Fiber Media Converters



	ICF-1150-M-SC/ST ICF-1150-M-SC/ST-T	ICF-1150I-M-SC/ST ICF-1150I-M-SC/ST-T	ICF-1150-S-SC/ST ICF-1150-S-SC/ST-T	ICF-1150I-S-SC/ST ICF-1150I-S-SC/ST-T	TCF-142-M-SC/ST TCF-142-M-SC/ST-T	TCF-142-S-SC/ST TCF-142-S-SC/ST-T	TCF-90-M/S
Optical Fiber Side							
Fiber Connector	SC or ST	SC or ST	SC or ST	SC or ST	SC or ST	SC or ST	ST
Cables Requirements	Single-mode: 8.3/125, 8.7/125, 9/125, or 10/125 μ m Multi-mode: 50/125, 62.5/125, or 100/140 μ m						
Transmission Distance	Single-mode: 40 km Multi-mode: 5 km						
Wavelength	Single-mode: 1310 nm Multi-mode: 850 nm						
Tx Output	Single-mode: > -5 dBm Multi-mode: > -5 dBm						
Rx Sensitivity	Single-mode: -25 dBm Multi-mode: -20 dBm						
Point-to-Point Transmission	Half-duplex or full-duplex						-
Multi-drop Transmission	Half-duplex, fiber ring						-
RS-232 Side							
Connector	DB9 female	DB9 female	DB9 female	DB9 female	Terminal block	Terminal block	DB9 female
Signals	Tx, Rx, GND	Tx, Rx, GND	Tx, Rx, GND	Tx, Rx, GND	Tx, Rx, GND	Tx, Rx, GND	TxD, RxD, GND (Loop-back wiring: RTS to CTS, DTR to DSR and DCD)
Baudrate	50 bps to 921.6 Kbps	50 bps to 921.6 Kbps	50 bps to 921.6 Kbps	50 bps to 921.6 Kbps	50 bps to 921.6 Kbps	50 bps to 921.6 Kbps	300 bps to 115.2 Kbps
RS-232/422/485 Side							
Connector	Terminal Block						-
RS-232 Signals	TxD, RxD, GND						-
RS-422 Signals	TxD+, TxD-, RxD+, RxD-, GND						-
RS-485-4w Signals	TxD+, TxD-, RxD+, RxD-, GND						-
RS-485-2w Signals	Data+, Data-, GND						-
Baudrate	50 bps to 921.6 Kbps						-
ESD Protection	15 KV for all signals						-
Isolation	-	2 KV	-	2 KV	-	-	-
Physical Characteristics							
Housing	Aluminum (1 mm)						ABS + PC
Dimensions (mm)	30.3 x 70 x 115 mm				67 x 100 x 22 mm		42 x 80 x 22 mm
Environmental Limits							
Operating Temperature	0 to 60°C or -40 to 85°C (for T models)						0 to 60°C
Operating Humidity	5 to 95% RH						5 to 95% RH
Storage Temperature	-40 to 85°C						-20 to 75°C
Power Requirements							
Source of Input Power	-	-	-	-	-	-	RS-232 port (TxD, RTS, DTR) or power input jack
Input Voltage	12 to 48 VDC				12 to 48 VDC		12 to 48 VDC
Power Consumption	127 mA @ 12 V	163 mA @ 12 V	127 mA @ 12 V	163 mA @ 12 V	140 mA @ 12 V		20 mA @ 5 V
Voltage Reversal Protection	Protects against V+/V- reversal				Protects against V+/V- reversal		-
Over Current Protection	1.1 A				1.1 A		-
Standards and Certifications							
Safety	UL 508				UL 60950-1		UL 60950-1
Hazardous Location	Hazardous Location: UL/cUL Class I Division 2 Groups A/B/C/D, ATEX Zone 2 EEx nC IIC						-
EMC	CE, FCC						-
EMI	EN 55022 Class B, FCC Part 15 Subpart B Class B						FCC Part 15 Subpart B Class B
EMS	EN 61000-4-2 (ESD) Level 4, EN 61000-4-3 (RS) Level 2, EN 61000-4-4 (EFT) Level 4, EN 61000-4-5 (Surge) Level 3, EN 61000-4-6 (CS) Level 2, EN 61000-4-8 (PFMF) Level 3				EN 61000-4-2 (ESD) Level 3, EN 61000-4-3 (RS) Level 2, EN 61000-4-4 (EFT) Level 2, EN 61000-4-5 (Surge) Level 2, EN 61000-4-6 (CS) Level 2, EN 61000-4-8 (SFMF) Level 1		IEC 61000-4-2 (ESD) Level 2, IEC 61000-4-3 (RS) Level 2, IEC 61000-4-4 (EFT) Level 2, IEC 61000-4-5 (Surge) Level 3, IEC 61000-4-6 (CS) Level 2, IEC 61000-4-8 (SFMF) Level 1
Freefall	IEC 60068-2-32				-		-
Green Product	RoHS, CRoHS, WEEE				RoHS, CRoHS, WEEE		RoHS, CRoHS, WEEE
Reliability							
Warranty	5 years (see www.moxa.com/warranty)						