

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		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	-	-	DB9 female
Signals	-	-	-	-	-	-	Tx, Rx, GND (Loop-back wiring: RTS to CTS, DTR to DSR and DCD)
Baudrate	-	-	-	-	-	-	50 bps to 921.6 Kbps
RS-232/422/485 Side							
Connector	-	-	-	-	Terminal Block		-
RS-232 Signals	TxD, RxD, SGND						
RS-422 Signals	TxD+, TxD-, RxD+, RxD-, SGND						
RS-485-4w Signals	TxD+, TxD-, RxD+, RxD-, SGND						
RS-485-2w Signals	Data+, Data-, SGND						
Baudrate	50 bps to 921.6 Kbps						
ESD Protection	15 KV for all signals						
Isolation	2 KV RMS isolation per I/O port for 1 minute				-	-	-
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						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 signal) 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			140 mA @ 12 V		20 mA @ 5 V (with termination disabled)
Burst Protection (EFT)	4 KV				2 KV		-
Surge Protection	2 KV				2 KV		-
Voltage Reversal Protection	Protects against V+/V- reversal				Protects against V+/V- reversal		-
Over Current Protection	1.1 A				1.1 A		-
Regulatory Approvals							
CE	Class B				-	-	Class B
FCC	Part 15 sub Class B				Part 15 Subclass B		Class B
Safety	UL 508						
UL/CUL	-				UL60950-1		-
EMI	EN55022 2006, Class B				EN55022 1998, Class B		-
EMS	EN61000-4-2 (ESD), Criteria A, Level 4				EN61000-4-2 (ESD), Criteria A, Level 3		-
	EN61000-4-3 (RS), Criteria A, Level 3				EN61000-4-3 (RS), Criteria A, Level 2		
	EN61000-4-4 (EFT), Criteria A, Level 4				EN61000-4-4 (EFT), Criteria A, Level 2		
	EN61000-4-5 (Surge), Criteria A, Level 3				EN61000-4-5 (Surge), Criteria A, Level 3		
	EN61000-4-6 (CS), Criteria A, Level 3				EN61000-4-6 (CS), Criteria A, Level 2		
	EN61000-4-8 (PFMF), Criteria A, Level 5				EN61000-4-8 (SFMF), Criteria A, Level 1		
ATEX	Class 1, Zone 2, EEx nC IIC (pending)				-		-
Hazardous Location	UL/cUL Class 1, Div. 2, Group A, B, C and D (Pending)				-		-
TÜV	EN 60950-1				EN60950-1		-
Freefall	IEC 60068-2-32				-		-
Water and Dust Proof	IP30				-		-
Reliability							
Warranty	5 years (see www.moxa.com/warranty)						