

Optical Fiber	Low-Speed Fiber Module		Multi-Mode	Single-Mode
	Fiber Cable Requirements		50/125 μm , 800 MHz	G.652
			62.5/125 μm , 500 MHz	
	Typical Distance		5 km	40 km
	Wavelength	Typical (nm)	850	1310
		TX Range (nm)	840 to 860	1290 to 1330
		RX Range (nm)	800 to 900	1100 to 1650
	Optical Power	TX Range (dBm)	0 to -8	0 to -8
		RX Range (dBm)	0 to -25	0 to -25
		Link Budget (dB)	15	20
Dispersion Penalty (dB)		1	1	
<p>Note: When using a power meter to measure the fiber TX power, set the baudrate to 9,600 bps and send data (00, ..., 0h) to the serial converter's serial port.</p>				
Pull High/Low Resistor for RS-485	150 kilo-ohm, 10 kilo-ohm, 4.7 kilo-ohm, 3.3 kilo-ohm, 1 kilo-ohm, 909 ohm, 822 ohm, 770 ohm, 500 ohm, 485 ohm			
RS-485 Data Direction Control	ADDC® (automatic data direction control)			
Terminator for RS-485	N/A, 120 ohms, 120 kilo-ohms			
Serial Signals				
RS-232	TxD, RxD, GND			
RS-422	Tx+, Tx-, Rx+, Rx-, GND			
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND			
RS-485-2w	Data+, Data-, GND			
Power Parameters				
Input Current	ICF-1150 Series: 127 mA @ 12 VDC ICF-1150I Series: 163 mA @ 12 VDC			
Input Voltage	12 to 48 VDC			
No. of Power Inputs	1			
Overload Current Protection	Supported			
Power Connector	Terminal block			
Power Consumption	ICF-1150 Series: 163 mA @ 12 VDC ICF-1150I Series: 127 mA @ 12 VDC			
Physical Characteristics				
Housing	Metal			
IP Rating	IP30			
Dimensions	30.3 x 70 x 115 mm (1.19 x 2.76 x 4.53 in)			
Weight	330 g (0.73 lb)			
Installation	DIN-rail mounting			

Environmental Limits

Operating Temperature	Standard Models: 0 to 60°C (32 to 140°F) Wide Temp. Models: -40 to 85°C (-40 to 185°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 4 kV; Signal: 2 kV IEC 61000-4-5 Surge: Power: 4 kV; Signal: 0.5 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m IEC 61000-4-8 PFMF
Environmental Testing	IEC 60068-2-1 IEC 60068-2-2 IEC 60068-2-3
Safety	EN 60950-1, IEC 60950-1
Vibration	IEC 60068-2-6
Hazardous Locations	-IEX models: IECEx

MTBF

Time	792,085 hrs
Standards	Telcordia (Bellcore), GB

Warranty

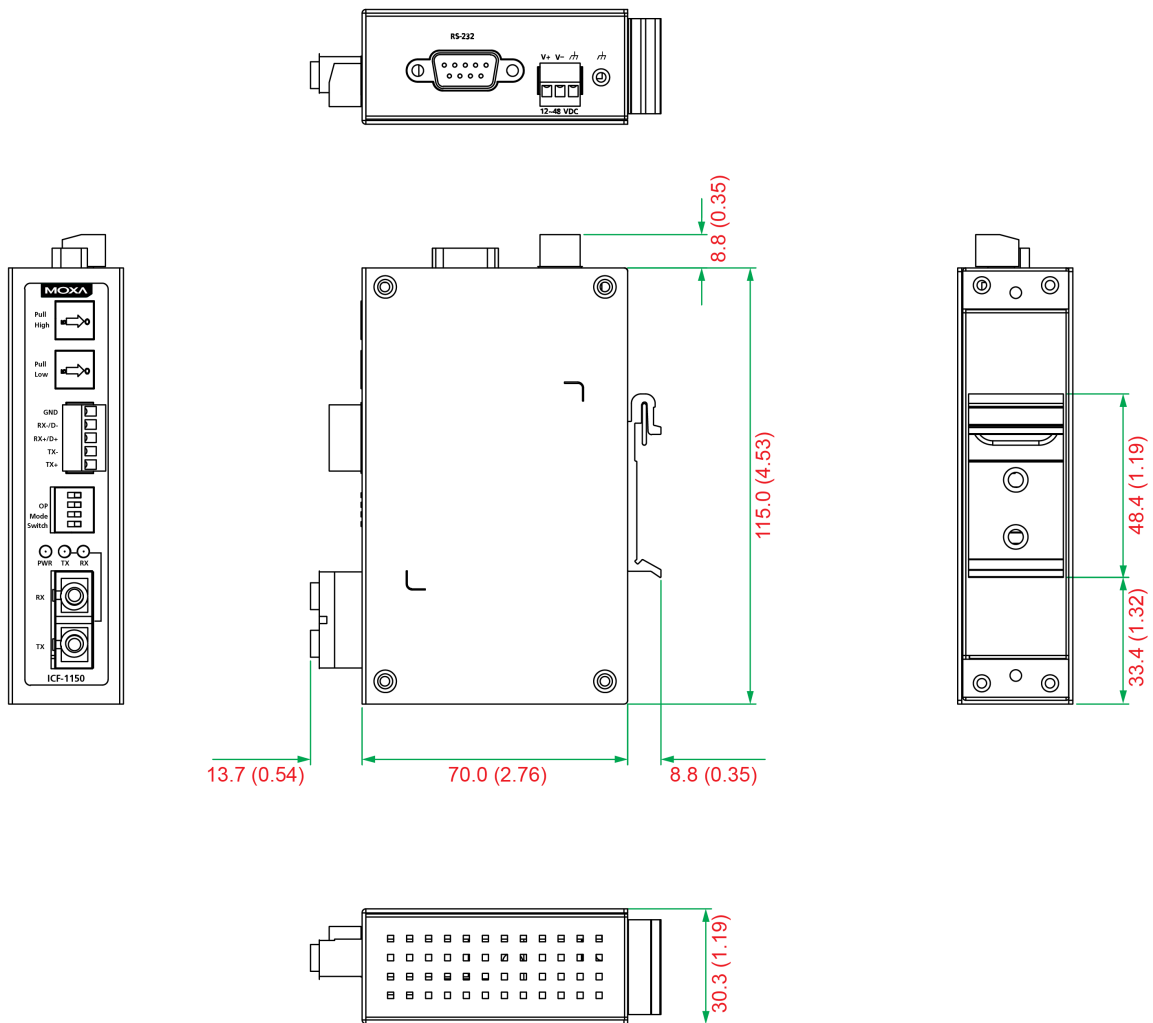
Warranty Period	5 years
Details	See www.moxa.com/warranty

Package Contents

Device	1 x ICF-1150 Series converter
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

Unit: mm (inch)



Ordering Information

Model Name	Isolation	Operating Temp.	Fiber Module Type	IECEx Supported
ICF-1150-M-ST	-	0 to 60°C	Multi-mode ST	-
ICF-1150-M-SC	-	0 to 60°C	Multi-mode SC	-
ICF-1150-S-ST	-	0 to 60°C	Single-mode ST	-
ICF-1150-S-SC	-	0 to 60°C	Single-mode SC	-
ICF-1150-M-ST-T	-	-40 to 85°C	Multi-mode ST	-
ICF-1150-M-SC-T	-	-40 to 85°C	Multi-mode SC	-
ICF-1150-S-ST-T	-	-40 to 85°C	Single-mode ST	-
ICF-1150-S-SC-T	-	-40 to 85°C	Single-mode SC	-
ICF-1150I-M-ST	2 kV	0 to 60°C	Multi-mode ST	-
ICF-1150I-M-SC	2 kV	0 to 60°C	Multi-mode SC	-
ICF-1150I-S-ST	2 kV	0 to 60°C	Single-mode ST	-
ICF-1150I-S-SC	2 kV	0 to 60°C	Single-mode SC	-
ICF-1150I-M-ST-T	2 kV	-40 to 85°C	Multi-mode ST	-

Model Name	Isolation	Operating Temp.	Fiber Module Type	IECEx Supported
ICF-1150I-M-SC-T	2 kV	-40 to 85°C	Multi-mode SC	–
ICF-1150I-S-ST-T	2 kV	-40 to 85°C	Single-mode ST	–
ICF-1150I-S-SC-T	2 kV	-40 to 85°C	Single-mode SC	–
ICF-1150-M-ST-IEX	–	0 to 60°C	Multi-mode ST	✓
ICF-1150-M-SC-IEX	–	0 to 60°C	Multi-mode SC	✓
ICF-1150-S-ST-IEX	–	0 to 60°C	Single-mode ST	✓
ICF-1150-S-SC-IEX	–	0 to 60°C	Single-mode SC	✓
ICF-1150-M-ST-T-IEX	–	-40 to 85°C	Multi-mode ST	✓
ICF-1150-M-SC-T-IEX	–	-40 to 85°C	Multi-mode SC	✓
ICF-1150-S-ST-T-IEX	–	-40 to 85°C	Single-mode ST	✓
ICF-1150-S-SC-T-IEX	–	-40 to 85°C	Single-mode SC	✓
ICF-1150I-M-ST-IEX	2 kV	0 to 60°C	Multi-mode ST	✓
ICF-1150I-M-SC-IEX	2 kV	0 to 60°C	Multi-mode SC	✓
ICF-1150I-S-ST-IEX	2 kV	0 to 60°C	Single-mode ST	✓
ICF-1150I-S-SC-IEX	2 kV	0 to 60°C	Single-mode SC	✓
ICF-1150I-M-ST-T-IEX	2 kV	-40 to 85°C	Multi-mode ST	✓
ICF-1150I-M-SC-T-IEX	2 kV	-40 to 85°C	Multi-mode SC	✓
ICF-1150I-S-ST-T-IEX	2 kV	-40 to 85°C	Single-mode ST	✓
ICF-1150I-S-SC-T-IEX	2 kV	-40 to 85°C	Single-mode SC	✓

Accessories (sold separately)

Cables

CBL-F9M9-150	DB9 female to DB9 male serial cable, 1.5 m
CBL-F9M9-20	DB9 female to DB9 male serial cable, 20 cm

Power Supplies

DR-4524	45W/2A DIN-rail 24 VDC power supply with universal 85 to 264 VAC or 120 to 370 VDC input, -10 to 50° C operating temperature
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