

CSM-200 Series

10/100BaseT(X) to 100BaseFX slide-in modules for the NRack System™



Features and Benefits

- LFP (Link Fault Pass-Through) and FEF (Far End Fault)
- Two different operation modes: store-and-forward and pass-through
- Auto-negotiation
- Plug and play
- Hot-swappable

Certifications



Introduction

The CSM-200 slide-in Ethernet-to-fiber media converters are designed for the NRack System™. The modules provide media conversion from 10/100BaseT(X) to 100BaseFX (SC/ST connectors), and can be installed in any NRack System™ chassis.

Specifications

Ethernet Interface

10/100BaseT(X) Ports (RJ45 connector)	1
100BaseFX Ports (multi-mode ST connector)	CSM-200-1213: Multi-mode ST connector
100BaseFX Ports (multi-mode SC connector)	CSM-200-1214: Multi-mode SC connector
100BaseFX Ports (single-mode SC connector)	CSM-200-1218: Single-mode SC connector
Magnetic Isolation Protection	1.5 kV (built-in)

Standards	IEEE 802.3u for 100BaseT(X) and 100BaseFX				
Optical Fiber			100BaseFX		
			Multi-Mode	Single-Mode	
	Fiber Cable Type		OM1	50/125 μ m	G.652
				800 MHz x km	
	Typical Distance		4 km	5 km	40 km
	Wavelength	Typical (nm)	1300		1310
		TX Range (nm)	1260 to 1360		1280 to 1340
		RX Range (nm)	1100 to 1600		1100 to 1600
	Optical Power	TX Range (dBm)	-10 to -20		0 to -5
		RX Range (dBm)	-3 to -32		-3 to -34
		Link Budget (dB)	12		29
		Dispersion Penalty (dB)	3		1
	<p>Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.</p> <p>Note: Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).</p>				

Power Parameters

Input Current	180 mA @ 12 VDC
Input Voltage	12 VDC
Overload Current Protection	Supported
Power Consumption	180 mA @ 12 VDC

Physical Characteristics

Dimensions	86.8 x 124.3 x 21 mm (3.42 x 4.89 x 0.83 in)
Weight	Packaged: CSM-200-1213: 170 g (0.37 lb) CSM-200-1214/1218: 180 g (0.40 lb) Product only: CSM-200-1213: 115 g (0.25 lb) CSM-200-1214/1218: 125 g (0.28 lb)

Environmental Limits

Operating Temperature	0 to 55°C (32 to 131°F)
Storage Temperature (package included)	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)

Standards and Certifications

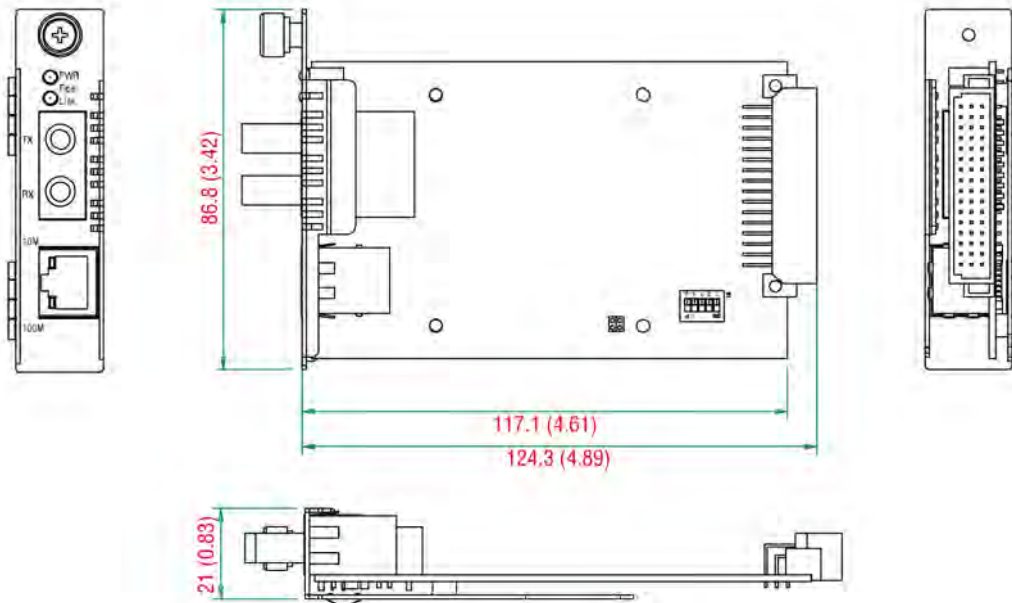
EMC	EN 55032/24
EMI	CISPR 32, FCC Part 15B Class A
EMS	IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz: 3 V/m IEC 61000-4-4 EFT: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-5 Surge: Power: 1 kV; Signal: 0.5 kV IEC 61000-4-6 CS: 150 kHz to 80 MHz: 3 V/m; Signal: 3 V/m

	IEC 61000-4-8 PFMF IEC 61000-4-11 DIPs
Environmental Testing	IEC 60068-2-1 IEC 60068-2-14 IEC 60068-2-2 IEC 60068-2-3
Safety	EN 60950-1, UL 60950-1
Vibration	IEC 60068-2-6
MTBF	
Time	1,454,560 hrs
Standards	Telcordia (Bellcore), GB
Warranty	
Warranty Period	5 years
Details	See www.moxa.com/warranty
Package Contents	
Device	1 x CSM-200 Series module
Documentation	1 x quick installation guide 1 x warranty card

Dimensions

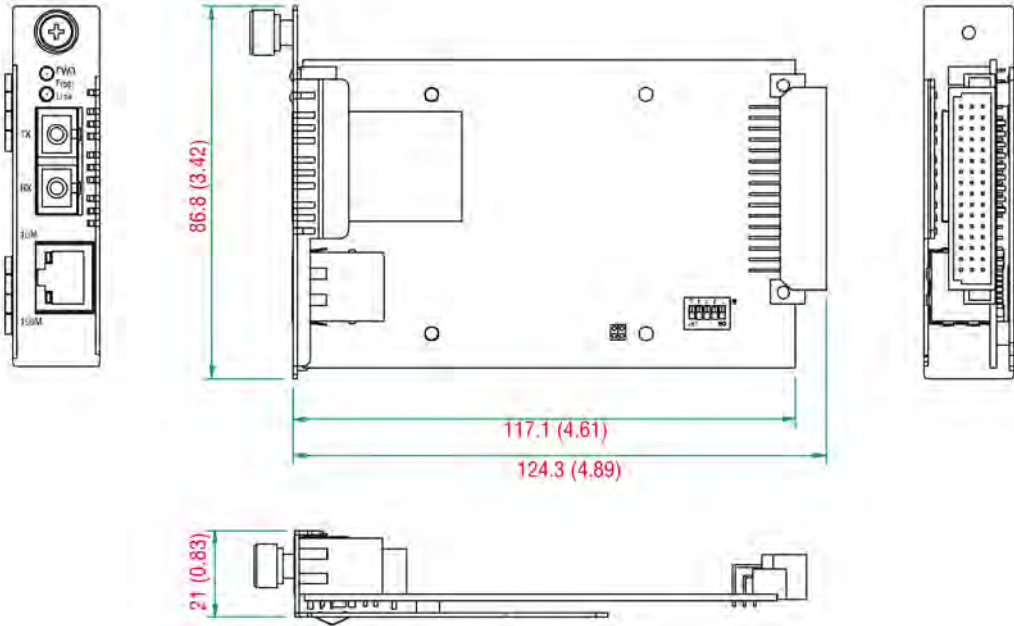
CSM-200-1213

Unit: mm (inch)



CSM-200-1214, CSM-200-1218

Unit: mm (inch)



Ordering Information

Model Name	Fiber Module Type
CSM-200-1213	Multi-mode ST
CSM-200-1214	Multi-mode SC
CSM-200-1218	Single-mode SC

© Moxa Inc. All rights reserved. Updated Feb 20, 2020.

This document and any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of Moxa Inc. Product specifications subject to change without notice. Visit our website for the most up-to-date product information.