

# **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 10	00BaseT(X) and 100BaseF	x			
Optical Fiber				100BaseFX		
			N	lulti-Mode	Single-Mode	
	Fiber Cable Type		OM1	50/125 μm	- G.652	
				800 MHz x km		
	Typical Distance		4 km	5 km	40 km	
	Wavelength	Typical (nm)		1300	1310	
		TX Range (nm)	12	260 to 1360	1280 to 1340	
		RX Range (nm)	1100 to 1600 1100 to		1100 to 1600	
		TX Range (dBm)	-	10 to -20	0 to -5	
	Optical Power	RX Range (dBm)		-3 to -32	-3 to -34	
		Link Budget (dB)		12	29	
		Dispersion Penalty (dB)		3	1	
	Note: When connecting a single-mode fiber transceiver, we recommend using an attenuator to prevent damage caused by excessive optical power.  Note: Compute the "typical distance" of a specific fiber transceiver as follows: Link budget (dB) > dispersion penalty (dB) + total link loss (dB).					
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: 1 CSM-200-1214/12	15 g (0.25 lb) 218: 125 g (0.28 lb)				
Environmental Limits						
Operating Temperature	0 to 55°C (32 to 13	31°F)				
Storage Temperature (package included)	-40 to 85°C (-40 to	o 185°F)				
Ambient Relative Humidity	5 to 95% (non-co	ndensing)				
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					

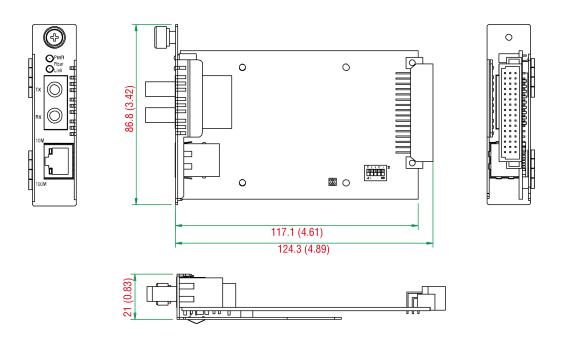


		어머씨자님
	IEC 61000-4-8 PFMF IEC 61000-4-11 DIPs	
Environmental Testing	IEC 60068-2-1 IEC 60068-2-14 IEC 60068-2-2 IEC 60068-2-3	
Safety	EN 60950-1, UL 60950-1	
Vibration	IEC 60068-2-6	
MTBF		
Time	1,454,560 hrs	
Standards	Telcordia (Bellcore), GB	
Warranty		
Warranty Period	5 years	
Details	See www.moxa.com/warranty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

# **Dimensions**

## CSM-200-1213

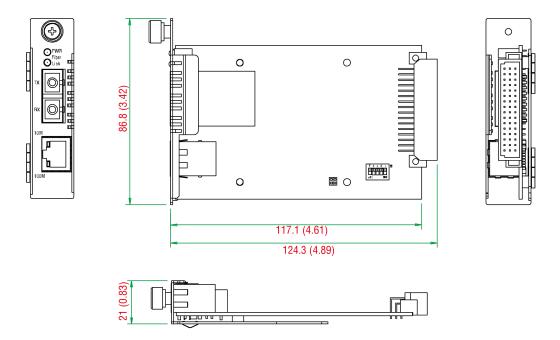
Unit: mm (inch)







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.