

RMC-111FB Series / RMC-111PB



RMC-111FB



RMC-111PB

➔ **Industrial rack-mount card type Ethernet to fiber media converter with 1x10/100Base-T(X) to 1x100Base-FX**

Features

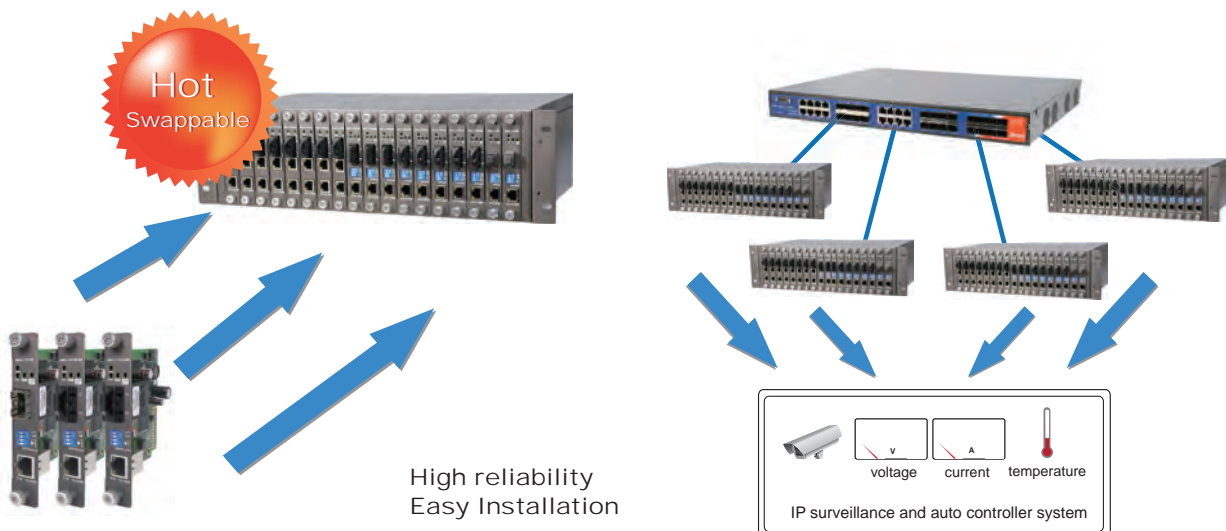
- Each converter supports one 10/100Base-T(X) port with auto-negotiation and auto-MDI/MDI-X
- Support Ethernet to fiber or Ethernet to SFP port for long distance communication
- Support **LFP (Link Fault Pass-through)** function
- Support full/half duplex operation
- Support store-and-forward transmission
- Provide DIP-Switches for function setting
- Hot-swappable, High reliability and easy installation
- Up to 18 slots of high-density installation in RMC-1000 chassis on the 19-inch rack



Introduction

RMC-111 series are industrial rack-mount card type Ethernet to fiber media converters for the rack-mount chassis box of RMC-1000, as these card type converters are hot-swappable and can be easily installed on RMC-1000. RMC-111 series are the cost-effective solution for the conversion between 10/100Base-T(X) and 100Base-FX interface, allowing you to extend communication distance by optical fiber. RMC-111 series support MDI/MDIX auto detection, so you don't need to use crossover wires.

RMC-111 series also support the **LFP (Link Fault Pass-through)** feature. When one side of the link fails, the other side continues transmitting packets and waits for a response that never arrives from the disconnected side. Use the DIP-Switch to enable the LFP function, then RMC-111 series will force the link to shutdown as soon as noticed that the other link has failed, giving the application software a sign to react to the situation. Therefore, the RMC-111 series, with RMC-1000 as their host, are reliable media converters that can satisfy most demands of operating environments.



Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

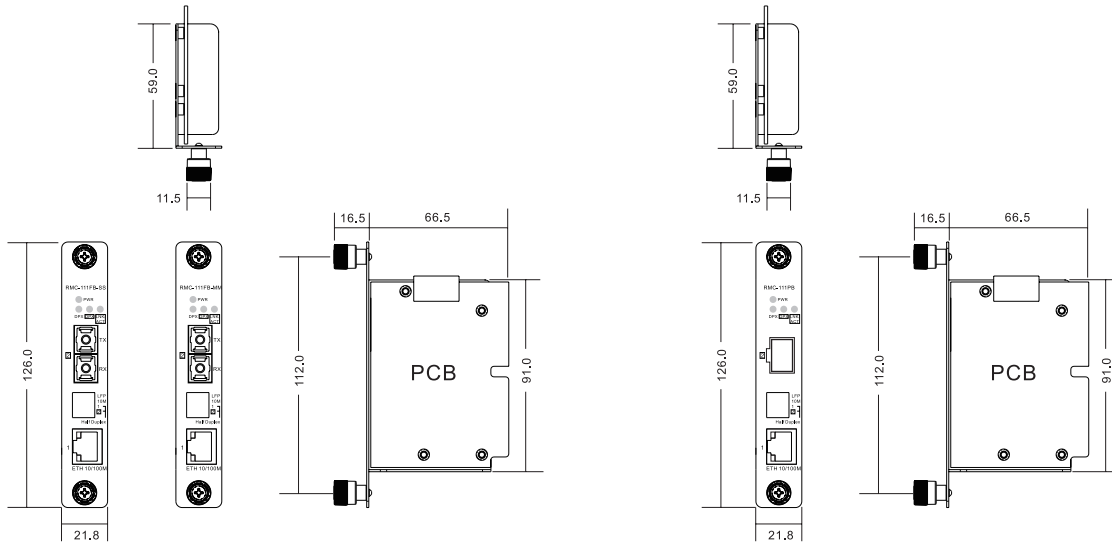
Industrial Wireless Access Point

Industrial Cellular VPN Router

Accessories

Network Management Utility

Dimensions



(Unit=mm)

Specifications

ORing Card-Type Media Converter Model		RMC-111FB-MM	RMC-111FB-SS	RMC-111PB
Physical Ports				
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX		1	1	1
Fiber Ports Specifications	Fiber Ports Number	1	1	-
	Fiber Ports standard	100Base-FX	100Base-FX	-
	Fiber Mode	Multi-mode	Single-mode	-
	Fiber Diameter (µm)	62.5/125 µm 50/125 µm	9/125 µm	-
	Fiber Optical Connector	SC	SC	-
	Typical Distance (km)	2 km	30 km	-
	Wavelength (nm)	1310 nm	1310 nm	-
	Max. Output Optical Power (dBm)	-14 dBm	-8 dBm	-
	Min. Output Optical Power (dBm)	-23.5 dBm	-15 dBm	-
	Max. Input Optical Power (Saturation)	0 dBm	0 dBm	-
	Min. Input Optical Power (Sensitivity)	-31 dBm	-34 dBm	-
Link Budget (dB)	7.5 dB	19dB	-	
100Base-FX SFP port		-	-	1
Technology				
Ethernet Standards		IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow control		
Processing		Store-and-Forward		

DIP-Switch setting	DIP-Switch 1 for LFP mode selection : (ON) enable / (OFF) disable DIP-Switch 2 for Ethernet speed selection : (ON) 10Mbps / (OFF) 10/100Mbps Auto-negotiate DIP-Switch 3 for Ethernet full/half duplex selection : (ON) Half-duplex / (OFF) Full/Half-Duplex Auto-negotiate DIP-Switch 4 for fiber full/half duplex selection : (ON) Half-Duplex / (OFF) Full-Duplex	
LED Indicators		
Power / Indicator	Green : Power LED x 1	
10/100Base-T(X) RJ45 port indicator	Green for port Link/Act Amber for 100Mbps indicator Green for port duplex indicator	
100Base-FX fiber port indicator	Green for fiber port Link/Act - (ON) Link up / (Blinking) Acting / (OFF) Link down Green for fiber port duplex indicator - (ON) Full-Duplex / (OFF) Half-Duplex	
LFP status indicator	Amber for link fault detected and passed	
Power		
Power consumption (Typ.)	2.2 Watts	
Reverse Polarity Protection	Present	
Physical Characteristics		
Dimensions (W x D x H)	21.8 (W) x 73.1 (D) x 126 (H) mm	
Weight (g)	145 g	140 g
Environmental		
Storage Temperature	-40 to 85°C(-40 to 185°F)	
Operating Temperature	-10 to 60°C (14 to 140°F)	
Operating Humidity	5% to 95% Non-condensing	
Regulatory Approvals		
EMI	FCC Part 15, CISPR (EN55022) class A	
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11	
Shock	IEC60068-2-27	
Free Fall	IEC60068-2-32	
Vibration	IEC60068-2-6	
Warranty	2 years	

Ordering Information

RMC-1 **A** **B** **C** **B** - **DD** - **EE**

Code Definition	10/100/1000Base-T(X) Port Number	100Base-FX Fiber Port Number	Fiber Port Type	Fiber Optical Mode	Fiber Optical Connector
Option	- 1 : 1 port	- 1 : 1 port	- F : 100Base-FX Fiber - P : 100Base-FX SFP	- MM : Multi-mode - SS : Single-mode	- SC : SC connector

Available Model	Model Name	Description
	RMC-111FB-MM-SC	Industrial Rack-mount card type Ethernet to fiber media converter with 1x10/100Base-T(X) and 1x100Base-FX, multi-mode, 2km/1310nm, SC connector
	RMC-111FB-SS-SC	Industrial Rack-mount card type Ethernet to fiber media converter with 1x10/100Base-T(X) and 1x100Base-FX, single-mode, 30km/1310nm, SC connector
	RMC-111PB	Industrial Rack-mount card type Ethernet to fiber media converter with 1x10/100Base-T(X) and 1x100Base-FX, SFP socket

Packing List

- RMC-111FB/111PB
- Quick Installation Guide

Optional Accessories (Can be purchased separately)

- FPC series : Fiber Patch cord