Antaira Technologies

IMP-C1000-SFP Series

10/100/1000TX to 100/1000FX Compact Industrial Gigabit Media Converter with SFP Slot and PoE Injector

Quick Installation Guide
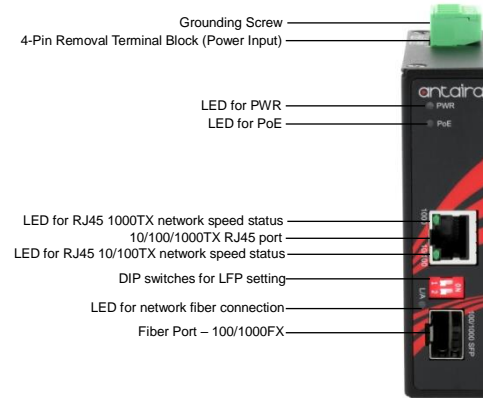
Version 1.1
Feb 2020

Tel: 1-844-268-2472
Fax: 1-714-671-9944
www.antaira.com

Package Check List

The package contains the following items:
- Quick Installation Guide
- 1 * IMP-C1000-SFP Industrial Gigabit Media Converter
- 1 * Wall mounting bracket set with screws
- 1 * DC cable –18 AWG & DC jack 5.5x2.1mm

Front Panel Layout

Grounding Screw
4-Pin Removal Terminal Block (Power Input)

LED for PWR
LED for PoE

LED for RJ45 1000TX network speed status
10/100/1000TX RJ45 port
LED for RJ45 10/100TX network speed status
DIP switches for LFP setting
LED for network fiber connection
Fiber Port – 100/1000FX

Top Panel View

IMP-C1000-SFP series top panel is equipped with one 4-pin removal terminal block connector for dual DC power inputs (48~55VDC).
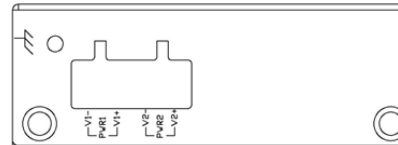
Product Overview

System Interface/Performance
- RJ-45 port support the auto MDI/MDI-X function
- Ethernet RJ-45 port connectivity 1*10/100/1000TX (w/PSE: 30W/port)
- Fiber connectivity with 1*100/1000FX SFP slot
- Store-and-forward switching architecture
- Jumbo frame support up to 10k
- Power line EFT protection: 2,000VDC; Ethernet ESD protection: 6,000VDC

Power Input& Connection
- DC 48~55VDC redundant power, with a 4-pin removal terminal block
- It is recommended to using UL listed Industrial Power Supply

Operating Temperature
- Standard operating temperature model: -10°C ~ 70°C
- Extended operating temperature model (–T): -40°C ~ 80°C

Case/Installation
- IP-30 protection
- DIN-Rail and wall mount design

Safety Precaution

If the DC voltage is supplied by an external circuit, please use a protection device on the power supply input.

LED Indicators

LED	Color		Description
Power	Green	On	Power input 1 or 2 is active
		Off	Power input 1 and 2 are inactive
Link Activity (SFP Port)	Green	On	Linked to network at 100/1000Mbps
		Flashing	Networking is active
		Off	Not connected to network
RJ45 Port (Upper LED)	Green	On	Linked to network at 1000Mbps
		Flashing	Networking is active
		Off	Not connected to network
RJ45 Port (Lower LED)	Green	On	Linked to network at 10/100Mbps
		Flashing	Networking is active
		Off	Not connected to network
PoE Status	Green	On	The port is supplying power to the powered-device
		Off	No powered-device attached or power supplying fails

Quick Installation

DIP-Switching Setting

There are 2 sets of DIP-switches on the front panel that are responsible for the settings of the SFP (Link Fault Pass) function and the SFP transmission rate.

DIP 1	DIP 2	Description
ON	ON	LFP Enable and Set SFP to 100Mbps
ON	OFF	LFP Enable and Set SFP to 1000Mbps
OFF	ON	LFP Disable and Set SFP to 100Mbps
OFF	OFF	LFP Disable and Set SFP to 1000Mbps

Note: After any DIP switch changes have been made, it is required to power cycle the unit for the changes to take effect

Ethernet RJ45 Port (Auto MDI/MDIX)

RJ-45 port is auto-sensing for 10Base-T, 100Base-TX or 1000Base-TX devices connections. Please follow the wiring pin assignment table below for Ethernet port installation.

RJ45 Ethernet Port Pin Outs					
Pins	T568A Color	T568B Color	10/100 Base-T(X)	1000 Base-T	PoE
1	White/Green	White/Orange	Rx+	TP0+	DC+
2	Green	Orange	Rx-	TP0-	DC+
3	White/Orange	White/Green	Tx+	TP1+	DC-
4	Blue	Blue	unused	TP2+	
5	White/Blue	White/Blue	unused	TP2-	
6	Orange	Green	Tx-	TP1-	DC-
7	White/Brown	White/Brown	unused	TP3+	
8	Brown	Brown	unused	TP3-	

12345678
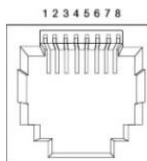
SFP Slots

The small form-factor pluggable (SFP) is a compact optical transceiver used in optical communications.

Please follow steps below for connecting the SFP and LC cable:
1. Insert the SFP transceiver module into the SFP slot as shown below in *Figure 1 (*Notice that the triangle mark is at the bottom of the SFP slot). *Figure 2* shows SFP transceiver module was inserted.
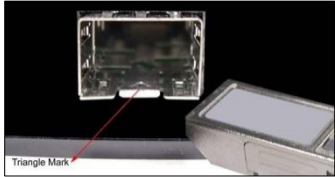
Figure 1   Figure 2
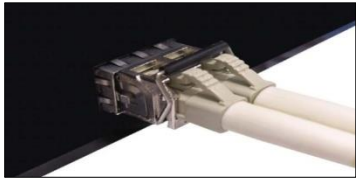
2. Insert the fiber cable of the LC connector into the transceiver as shown below in *Figure 3.*

Figure 3

Power Inputs Wiring

Please follow the steps below to insert the power wire:
1. Insert the positive and negative wires into the **PWR1 (V1+, V1-)** and **PWR2 (V2+, V2-)** contacts on the terminal block connector as shown below in *Figure 4.*
2. Tighten the wire-clamp screws to prevent the wires from loosening, as shown below in *Figure 5.*
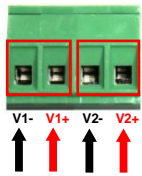
Figure 4   Figure 5

Industrial Switch Mounting

DIN-Rail Mounting

The DIN-Rail bracket is pre-installed on the industrial Ethernet switch from the factory. Please refer to *Figure 6* for DIN-Rail bracket installation reference.

Figure 6

Follow below steps for installing the industrial switch on the DIN-Rail track:
1. Insert the top of the DIN-Rail onto the track as shown below in *Figure 7.*
2. Lightly pull down the bracket onto the rail as shown below in *Figure 8.*
3. Check if the bracket is mounted tightly on the rail.
4. To remove the industrial Ethernet switch from the rail, do the opposite from the above steps.
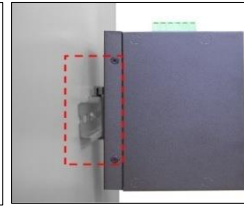
Figure 7   Figure 8

Wall Mounting

Follow the steps below to mount the industrial Ethernet switch using the wall mounting bracket as shown below in *Figure 9.*

1. Remove the DIN-Rail bracket from the industrial Ethernet switch by loosening the screws.
2. Place the wall mounting brackets on the top and bottom of the industrial Ethernet switch.
3. Use the screws to screw the wall mounting bracket on the industrial Ethernet switch.
4. Use the hook holes at the corners of the wall mounting bracket to hang the industrial Ethernet switch on the wall.
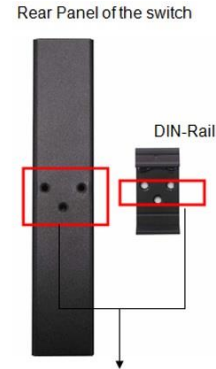5. To remove the wall mount bracket, do the opposite from the steps above.

Rear Panel of the switch

DIN-Rail

Figure 9

Field Maintenance and Service

- If the device requires servicing of any kind, the user is required to disconnect and remove it from its mounting. The initial installation should be done in a way that makes this as convenient as possible.
- Voltage/power lines should be properly insulated as well as other cables. Be careful when handling them so as to not trip over.
- Do not under any circumstance insert foreign objects of any kind into the heat dissipation holes located in the different faces of the device. This may not only harm the internal layout, but might cause harm to user as well.
- Do not under any circumstance open the device for any reason. Please contact your dealer for any repair needed or

follow the instructions within the manual.

Warranty Policy