

Antaira Technologies

IMP-C1000-SFP-bt-24 Series

Industrial Gigabit IEEE 802.3bt Ethernet-to-Fiber Media Converter, 1*10/100/1000Tx RJ45 (90W/Port) to 1*100/1000 SFP Slot; 12~55VDC Power Input

Quick Installation Guide

Version 1.0 (April 2020)



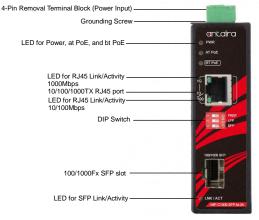
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Package Check List

The package contains the following items:

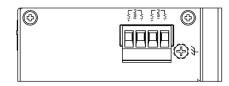
- Quick Installation Guide
- IMP-C1000-SFP-bt-24(-T)
- Wall mounting bracket set with screws
- DC cable –18 AWG & DC jack 5.5x2.1mm

Front Panel Layout



Top Panel View

IMP-C1000-SFP-bt-24 series top panel is equipped with one 4-pin removal terminal block connector for dual DC power inputs (12~55VDC).



Product Overview

System Interface/Performance

- RJ45 port support the auto MDI/MDI-X function
- Ethernet RJ45 port connectivity 1*10/100/1000Tx (w/PSE: 90W/port)
- Fiber connectivity with 1*100/1000Fx SFP slot
- Store-and-forward switching architecture
- Supports 10Kbytes Jumbo Frame

Power Input & Connection

- DC 12~55VDC redundant power, with a 4-pin removal terminal block
- Max. current: 7A
- Max. PoE output: 90W
- It is recommended to using UL listed Industrial Power Supply

Operating Temperature

- Standard operating temperature model: -10°C ~ 65°C
- Extended operating temperature model (–T): -40°C ~ 75°C

Case/Installation

- IP30 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			
Power		Off	Power input 1 and 2 are inactive			
AT PoE	Green	On	IEEE 802.3af/at connection			
		Off	No powered-device attached or power supplying fails			
	Blue	On	IEEE 802.3bt connection			
BT PoE		Flashing	 PoE over current or cable short Invalid connection check signature or connec check error is detected 			
		Off	No powered-device attached or power supplying fails			
RJ45 Port (Upper LED)	Green	On	Linked to network at 1000Mbps			
		Flashing	Networking is active			
		Off	Not connected to network			
	Green	On	Linked to network at 10/100Mbps			
RJ45 Port (Lower LED)		Flashing	Networking is active			
		Off	Not connected to network			
SFP Port Link/Act	Green	On	Connected to network, 100/1000Mbps			
		Flashing	Networking is active			
		Off	Not connected to network			

DIP-Switching Setting

There are 3 sets of DIP-switches on the front panel that are responsible for the settings of PRRT (PD Remote Reset Technology) function, LFP (Link Fault Pass) function, and SFP transmission rate.

DIP-Switch Number	ON	OFF
1	PRRT Enabled	PRRT Disabled
2	LFP Enabled	LFP Disabled
3	SFP 100Fx	SFP 1000Fx

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

Quick Installation

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.

~~~.g						
RJ45 Ethernet Port Pin Outs					12345678	
Pins	T568A Color	T568B Color	10/100 Base-T(X)	1000 Base-T	PoE	CARARAR .
1	White/Green	White/Orange	Rx+	TP0+	DC+	N 0000000 N
2	Green	Orange	Rx-	TP0-	DC+	
3	White/Orange	White/Green	Tx+	TP1+	DC-	اللي ولا
4	Blue	Blue	unused	TP2+		
5	White/Blue	White/Blue	unused	TP2-		i

6	Orange	Green	Tx-	TP1-	DC-
7	White/Brown	White/Brown	unused	TP3+	
8	Brown	Brown	unused	TP3-	

#### 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.* 

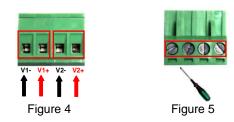


Figure 3

#### **Power Inputs Wiring**

Please follow the steps below to insert the power wire:

- 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.*



#### **Industrial Switch Mounting**

#### **DIN-Rail Mounting**

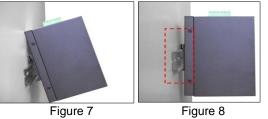
The DIN-Rail bracket is pre-installed on the industrial Ethernet switch from the factory. Please refer to *Figure 6* for DIN-Rail bracket installation reference.



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.



#### 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. Rear Panel of the switch
- 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.
- Use the hook holes at the corners of the wall mounting bracket to hang the industrial Ethernet switch on the wall.
- To remove the wall mount bracket, do the opposite from the steps above.

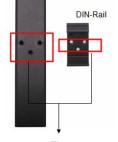


Figure 9

# 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

#### Warranty Conditions

Products supplied by Antaira Technologies are covered in this warranty for sub-standard performance or defective workmanship. The warranty is not, however, extended to goods damaged in the following circumstances:

- (a) Excessive forces or impacts
- (b) War or an Act of God: wind storm, fire, flood, electric shock, earthquake
- (c) Use of unqualified power supply, connectors, or unauthorized parts/kits
- (d) Replacement with unauthorized parts

#### RMA and Shipping Costs Reimbursement

Customers shall always obtain an authorized "RMA" number from Antaira before shipping the goods for repair or replacement.

- Within the warranty period (based on the invoice date), all parts and labor are free of charge to the customers.
- Customers are required to be responsible for the cost of parts and labor if the products are out of warranty.
- For RMA service, customers are required to be responsible for the shipping expense for shipping the RMA unit(s) to Antaira; and Antaira will be responsible for the shipping expense by ground service for the return repair/replace unit(s) back to customers.

#### **Limited Liability**

Antaira would not be held responsible for any consequential losses from using Antaira's product.

#### Warranty Period

5-Year Warranty

#### Antaira's Customer Service and Support

- Antaira's Technical Service & Support Centers:
  - + 844-268-2472 (Antaira US Headquarter)
    - + 48-22-862-88-81 (Antaira Europe Office)
    - + 886-2-2218-9733 (Antaira Asia Office)
- Antaira's Web Sites & Repair/Support Emails: <u>www.antaira.com</u> / <u>support@antaira.com</u> <u>www.antaira.eu</u> / <u>info@antaira.com.tw</u> <u>www.antaira.com.tw</u> / <u>info@antaira.com.tw</u>

*Any changes will be announced on the Antaira website.