



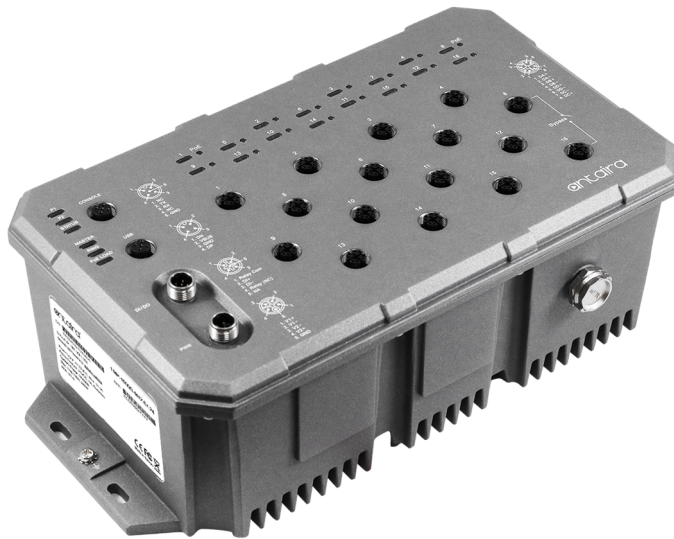
Antaira Technologies

LMP-1600G-M12-67-24 Series

16-Port Industrial M12 IP67 Waterproof Gigabit PoE+ Light Layer 3 Managed Ethernet Switch, with 16*10/100/1000Tx M12 Connectors (X-Coded) (30W/Port), 24-55VDC Power Input

Quick Installation Guide

Version 1.0
(October 2021)



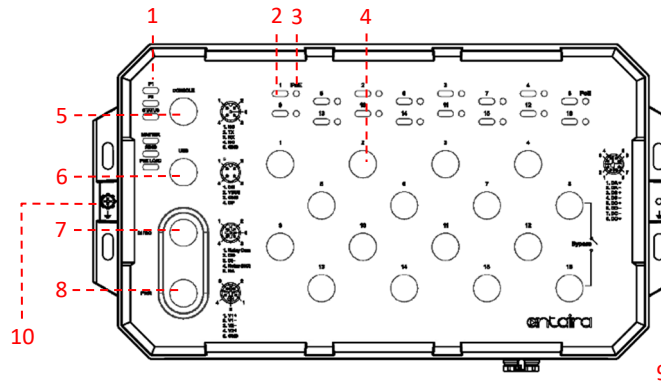
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Package Check List

The package contains the following items:

- 1 – Quick Installation Guide
- 1 – LMP-1600G-M12-67-24(-T)
- 1 – Dust Cover Set

Front Panel Layout



1	Power 1, Power 2, Status, Master, Ring, and PoE Load	6	USB Port
2	Port 1~16 Link/Active Status 10/100/1000 Mbps	7	DI/DO Port
3	Port 1~16 PoE Status	8	Power Input Port
4	10/100/1000Base-T(X) Ethernet Port	9	Mounting hole
5	Console Port	10	Grounding screw

Product Overview

System Interface/Performance

- All Ethernet ports support the auto MDI/MDI-X function
- M12 connector with IP67 rated protection
- Store-and-forward switching architecture

Power Input & Connection

- DC 24 to 55V redundant power
- It is recommended to use a UL listed industrial power supply

Operating Temperature

- Standard operating temperature model: -10°C to 65°C
- Extended operating temperature model: -40°C to 70°C

Case/Installation

- IP67 protection
- Wall Mount design

LED Indicators

LED	Color	Description		
P1	Green	On	Power input 1 is active	
		Off	Power input 1 is inactive	
P2	Green	On	Power input 2 is active	
		Off	Power input 2 is inactive	
Status	Green	On	No event happened after the last reset or reboot	
		On	1. System booting 2. Event happened by software setting	
	Red	Flashing	Firmware Upgrade	
Master	Green	On	ERPS Owner Mode (Ring Master) is ready	
		Off	ERPS Owner Mode is not active	
Ring	Green	On	ERPS Ring Network is active and work well	
		Flashing	ERPS Ring works abnormally or misconfigure	
		Off	ERPS Ring Network is not active	
PoE LOAD	Green	Off	The current PoE output of all connected PDs is ≤ 50%	
		Blue	On	The current PoE output of all connected PDs is 51% ~ 70%
		Red	On	The current PoE output of all connected PDs is 71% ~ 90%
		Red	Flashing	The current PoE output of all connected PDs is 91% ~ 100%
Note: The Max. PoE output of this switch is 240Watts.				
LINK/ACT (Port 1~16)	Green	On	Connected to network, 1000 Mbps	
		Flashing	Networking is active	
		Off	Not connected to network	
	Amber	On	Connected to network, 10/100 Mbps	
Flashing		Networking is active		
PoE	Amber	On	Supplying power to the powered-device	
		Off	Not connected to a Powered Device	

Quick Installation

Ethernet Ports

M12 Ports (Auto MDI/MDI-X)

All M12 ports (8-Pin X-Coded Female Connector) are auto-sensing for 10Base-T, 100Base-TX, or 1000Base-T device connections. Please follow the wiring pin assignment table below for Ethernet port installation.

Illustration	Pinouts	10/100Base-T(X) Signal	1000Base-T Signal
	1	Transmit Data + (TX+)	BI_DA+
	2	Transmit Data - (TX-)	BI_DA-
	3	Receive Data + (RX+)	BI_DB+
	4	Receive Data - (RX-)	BI_DB-
	5		BI_DD+
	6		BI_DD-
	7		BI_DC-
	8		BI_DC+

NOTE: Recommended use the wire gauge between 18AWG.

Power Input Wiring

- Dual DC power inputs for power redundancy
- Connection format: M12 5-Pin K-Coded male connector
- Pin assignment of M12 power connector:

Illustration	Pinouts	Function
	1	Power Input 1 + (V1+)
	2	Power Input 1 - (V1-)
	3	Power Input 2 - (V2-)
	4	Power Input 2 + (V2+)
	5	GND

NOTE: Recommended use the wire gauge between 24AWG.

Console Port

- Connection format: M12 5-Pin A-Coded Female Connector
- Baud rate 115,200bps, 8, N, 1

Illustration	Pinouts	Signal
	1	NC
	2	TX
	3	RX
	4	NC
	5	GND

USB Port

- Connection format: M12 4-Pin A-Coded Female Connector
- USB Port is for configuration backup / restore

Illustration	Pinouts	Function
	1	DN
	2	VBUS
	3	GND
	4	DP

Relay Contact and Digital Input

- Connection format: M12 5-Pin A-Coded Male Connector
- Minimum Wire Gauge: 24AWG

Illustration	Pinouts	Function	Function
	1	DI+ Relay Com	Common
	2	DI+	Digital Input +
	3	DI-	Digital Input -
	4	DI- Relay (N.C.)	Normally Closed
	5	NA	Not Assigned

- Digital Input (DI)

The digital input is used for monitoring two external events via an external voltage source. When the voltage level on digital input pins changes from high voltage to low voltage, the DI function will be triggered. Below table is shown a detail specification of the digital input.

Specification		Description
Level 0 (Low)	-30~8VDC	Will trigger DI function (active trigger states)
Level 1 (High)	10~30VDC	Normal Status (inactive trigger states)
Nominal input voltage	24VDC	
Max. input voltage	30VDC	
Nominal input current	5mA (typical)	
Max. input current	8mA	

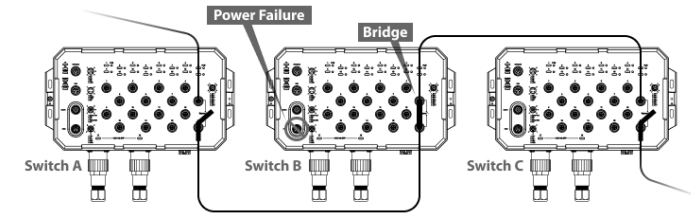
Reset to Default

Please perform the below steps to reset the switch to factory default setting.

- Step 1.** Reverse the Tx & Rx of the Console Cable and plug it into the console port.
- Step 2.** Restart the power.
- Step 3.** The switch will start rebooting with the port LEDs flashing.
- Step 4.** When the Status LED turns into Green, the process is completed.
- Step 5.** Remove the reversed console cable.

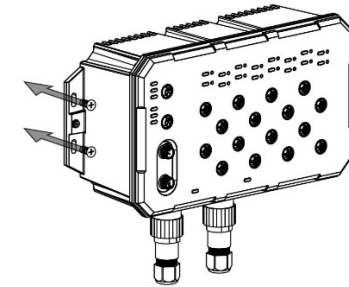
Bypass Function

This Ethernet switch supports bypass function by two Ethernet ports (8 and 16). When one of the Ethernet switches loses power, Ethernet ports (8 and 16) will bypass the power lost Ethernet switch to prevent the network from disconnecting.



Wall Mounting Installation

Follow the steps below to mount the switch to a wall using the screw holes.



- Step 1.** Prepare 4 screws for mounting the switch to a wall. (Recommended use the M5 screws.)
- Step 2.** Based on the positions of 4 screw holes on the left and right side of the switch to make 4 screw holes on a wall accordingly.
- Step 3.** Insert the screws through the screw holes on the switch and screw the switch into the wall.
- Step 4.** To remove the switch from the wall, do the opposite from the steps above.

Antaira's Customer Service and Support

- Antaira's Technical Service & Support Centers:
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*Any changes will be announced on the Antaira website.