



Atop Technologies, Inc.

Industrial Managed Gigabit Ethernet Switch

EMG8508 / EMG8510 Series  
EMG8608 / EMG8610 Series

Hardware Installation Guide

Version 2.0  
Updated in September , 2017



Tel: 886-3-5508137  
Fax: 886-3-5508131  
www.atop.com.tw

P/N:89900497G

Package Check List

Inside the package you will find the following items:

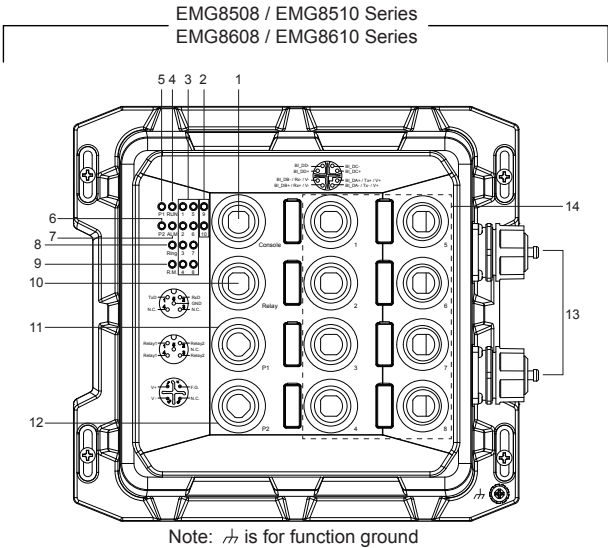
- Industrial Managed Gigabit Ethernet Switch x 1
- Protective caps for all SFP ports (Depend on purchased model)
- Installation Guide with Warranty Card x 1

⚠ Never install or work on electrical or cabling during periods of lightning activity. Never connect or disconnect power when hazardous gases are present.

⚠ Warning: Hot Surface Do Not Touch.

⚠ Caution: CLASS 1 LASER PRODUCT. Do not stare into the laser!

Product Layout

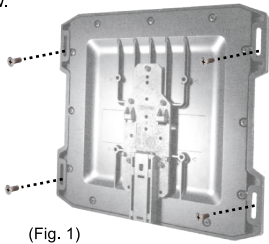


1. M12 A-Coding Console Port
2. SFP Ports LEDs (for EMG8510 Series)
3. M12 X-coding Ethernet ports and/or PoE LEDs
4. RUN LED
5. PWR1 LED
6. PWR2 LED
7. ALM LED
8. Ring LED
9. Ring Master LED
10. M12 A-Coding Alarm relay or alarm output
11. M12 S-Coding PWR1 connector
12. M12 S-Coding PWR2 connector
13. 1000 BASE-X SFP Slots (for EMG8510 Series)
14. 10/100/1000 BASE-T(X) M12 X-coding Ethernet ports and/or 10/100/1000 BASE-T(X) PoE M12 X-coding Ethernet Ports (EMG8508-4PoE/ EMG8510-4PoE-2SFP, PoE ports at Port 1,2,5,6)

Installation Overview

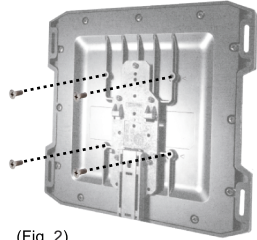
The device's appearance is as in the figure below.

1. Proceed to place the screws on the back of the device as show in (Fig. 1).



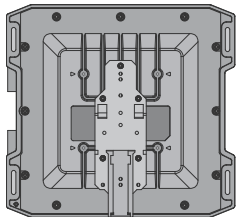
(Fig. 1)

2. If you have the VESA kit, proceed to place the screws on the back of the device as show in (Fig. 2)

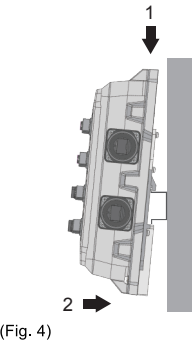


(Fig. 2)

3. Although internal grounding has been done inside, in order to ensure overall maximum performance and protect your device, it is still strongly advised to ground the device properly; hazardous ESD can come into contact and damage your equipment. On the power terminal block, there is a terminal for Frame Ground, you can choose whether to connect it to the grounding or you may opt to connect to the grounding screw next to the terminal block ( the one chosen should be connect-ed at all times ) (Fig. 3)



(Fig. 3)

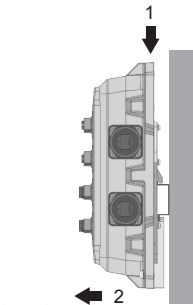


(Fig. 4)

4. You can then choose whether to plug in the other peripheral ports at this point or do it later depending on the actual location of the device or level of comfort for performing such operation.

**Remeber to plug in the protective caps for the unused SFP.**

5. If you have purchased the DIN-Rail kit, Once the plate has been firmly put in place, proceed to mount the whole device as shown in (Fig. 4). Proceed to (Fig. 5) if you want to remove the device from DIN-Rail.



(Fig. 5)

6. Next we can then proceed to connect the device to the LAN (switch or PC, depending on the case), take care on using the M12 connector; after this we can then proceed to the device's settings

- The housing has a good thermal conductivity material, so the heat can be dissipated to the outside through the housing by conduction-convection .
- This switch's factory IP by default is 10.0.50.1 you can access the device by its Web UI once it is connected to a physical network (or using Management Utility, for more information on Management Utility, please refer to its manual). Please be aware that the PC needed for this procedure needs to be in the same subnet, or you may refer yourself to the device User's Manual.

\*Management Utility only support user name, password and IP address change.  
Detail setting please set on Web UI.

LED Indicators

Name	Color	Status	Message
P1	Green	On	Power is supplied from PWR1/PWR2
		Off	No power input detected from PWR1/PWR2
Alarm	Red	On	Alarm is triggered by user defined events
		Off	Alarm is not triggered by user defined events
RUN	Green	Blinking	AP firmware is running normally
		Off	System is not ready or halt
LAN	Green	On	Ethernet is linked
		Blinking	Ethernet is active and data is being transmitted
		Off	Ethernet is not linked
	Amber	On	Power is being supplied to a Powered Device (PD)
		Off	Power is not supplied to a PD
Ring	Green	On	Ring is enabled
		Blinking	Ring is connected successfully
		Off	Ring is disabled
R.M	Green	On	The device is a Master of the ERPS or IA-Ring
		Off	The device is a Slave of the ERPS or IA-Ring
SFP	Green	On	Port is linked
		Blinking	Data is transmitting on this port
		Off	No data is transmitting

Field Maintenance and Service

If the device requires servicing of any kind, you may need 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 the so as to not trip over
- Do not under any circumstance open the device for any reason. Please contact your dealer for any repair needed or follow the instructions on section of your User's Manual.

Power Requirements

- Power input :
  - 12– 57 VDC, 1.1A max, 13.2W max(For Non-PoE Models)
  - 45– 57 VDC, 3.1A max, 139.5W max(For 802.3af Models)
  - 51– 57 VDC, 5.1A max, 260.1W max(For 802.3at Models)
  - 50-145 VDC, 0.27A max, 13.5W max(For High voltage Models)
  - 50-145 VDC, 0.30A max, 15.0W max(For High voltage SFP Models)

- Alarm output : 1A@24A VDC SELV for signal use only
- The Normal Voltage device is open type , designed redundant input and supplied by SEL V power source.

The High Voltage device is open type , designed redundant input and supplied by IEC/EN/UL 61010-2-201 certified power supply isolated from MAINS by double insulation.

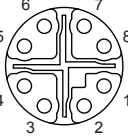
- Cable Assembly Requirement : Minimum suitable used at 90°C

- Cable Assembly Information :

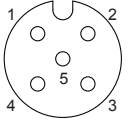
Company	Cat no Suitable	Cat no Suitable
Phoenixcontact	1411043	AWG26 Lan Port-M12-X
Phoenixcontact	1413991	AWG26 Lan Port-M12-A
Phoenixcontact	1404642	AWG26 Power Port-M12-S
Weidmueller	2059890050	SFP Port

Pin Assignments and Connections

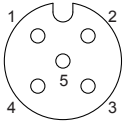
10/100/1000Base-T(X) Ethernet, PoE port Pinouts

M12 X-coded								
	1000Base-T							
Pin	1	2	3	4	5	6	7	8
Signal	BI_DA+	BI_DA-	BI_DB+	BI_DB-	BI_DD+	BI_DD-	BI_DC-	BI_DC+
10/100Base-T(x)								
Pin	1	2	3	4	5	6	7	8
Signal	Tx+	Tx-	Rx+	Rx-				
PoE								
Pin	1	2	3	4	5	6	7	8
Signal	V+	V+	V-	V-				


RS232 Console port Pinouts

M12 A-coded					
	RS232-Console				
Pin	1	2	3	4	5
Signal	TXD	RXD	NC	NC	GND

Relay output port Pinout

M12 A-coded					
	Relay output				
Pin	1	2	3	4	5
Signal	Relay1_2	Relay2_1	Relay2_2	Relay1_1	NC

Power port Pinouts

M12 S-coded				
	Power			
Pin	1	2	3	4
Signal	VIN+	VIN-	NC	FG

Attention

1. The device needs to be installed in an area of pollution degree 2 or less.
2. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may not be impaired.
3. Clean the device with soft cloth with dry.
4. The installation that the safety of any system incorporating the equipment is the responsibility of the assembler of the system
5. It should be installed suitable Enclosure (at least Type 1 or equal rating)
6. Before powering the device, the Functional Ground (Grounding Screw) shall be connected with Y type wiring to the ground and torque with 0.2 Nm.
7. Power +/- pins can't cross-connect to equipment that this device connects to.
- 8.Wear on suitable personal safety protection suit (safety working shoes / working gloves).
9. It should be installed suitable fiber transceiver (Avago AFCT-57X5 / AFBR-57X5 series family or equal type)

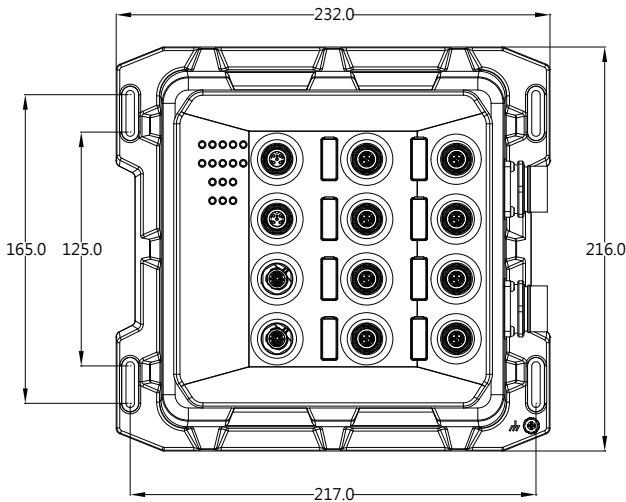
Environmental Limits

- Operating Temperature: -40 to 70° C (-40° F to 167° F)
- Storage Temperature: -40 to 85°C (-40 to 185°F)
- Ambient Relative Humidity: 5 to 95%, 55°C (non-condensing)
- Altitude: up to 2,000 m
- IP67
- Lan and Power Port Cap Information(Indoor use only)

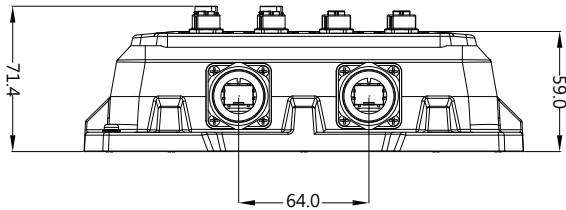
Company	Cat. No.	Type Torque
Atop	Phoenixcontact 3990079G	1560251 Power port Plastic 0.2 Nm
Atop	Phoenixcontact 59908571G	1430488 Power port Metal 0.2 Nm
Atop	Phoenixcontact 3990078G	1553129 Lan port Plastic 0.2 Nm
Atop	Phoenixcontact 59908561G	1503302 Lan port Metal 0.2 Nm

Mechanical Dimensions (Unit=mm)

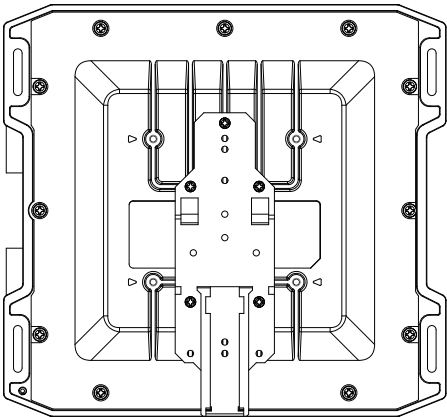
Front View



Side View (for EMG8510 Series)



Bottom View



※ The wall Din rail kit illustrated in this document is for reference only and is not included in the package.

Warranty Policy

Warranty Conditions

Products supplied by Atop 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 Atop before shipping the goods to be repaired to Atop. When in normal use, a sold product shall be replaced with a new one within 3 months after purchase. The shipping cost from the customer to Atop will be reimbursed by Atop.  
After 3 months and still within the warranty period, it is up to Atop whether to replace the unit with a new one; normally, as long as a product is under warranty, all parts and labor are free of charge to the customers.  
After the warranty period, the customer shall cover the cost for parts and labor.Three months after purchase, the shipping cost from the customer to Atop will not be reimbursed, but the shipping cost from Atop to the customer will be paid by Atop.

Limited Liability

Atop shall not be held responsible for any consequential losses from using Atop's product.

Warranty Period

Product Categories	Warranty	Product Categories	Warranty
Ethernet Switches	5 Years	DIN-Rail Power Supplies	3 Years
Wireless		Power Adaptors	1 Year
Serial Device Servers		Antennas	
Modbus Gateways		Other Accessories	
Media Converters			
Embedded Device Servers			

The warranty certification will not be effective until an authorized stamp issued by Atop's overseas agents.

Purchase Date:            /            /            (yyyy/mm/dd)

Serial Number           

Atop Customer Services and Supports

1. Please contact your local dealers or Atop Technical Support Center at the following numbers.  
+ 886-3-550-8137 (Atop Taiwan)  
+ 86-21-6495-6232 (Atop China)
2. Please report the defected problems via Atop's Web site or E-mail account  
Web Site : www.atop.com.tw, e-mail : service@atop.com.tw  
Web Site : www.atop.com.cn, e-mail : service@atop.com.cn
3. Company Addr: 2F, No. 146, Sec. 1, Tung-Hsing Rd., Jubei, Hsinchu 30261, Taiwan, R.O.C.  
Manufacturer Addr: 1st FL 30 R&D RD II,SCIENCE-BASED INDUSTRIAL PARK,HSINCHU 300 TAIWAN, R.O.C

— Any changes to this material will be announced on Atop website. —