



Atop Technologies, Inc.

Industrial Unmanaged Gigabit Ethernet Switch

EHG7305 / EHG7306 / EHG7307 Series

Hardware Installation Guide

Version 1.0

Updated in December, 2015

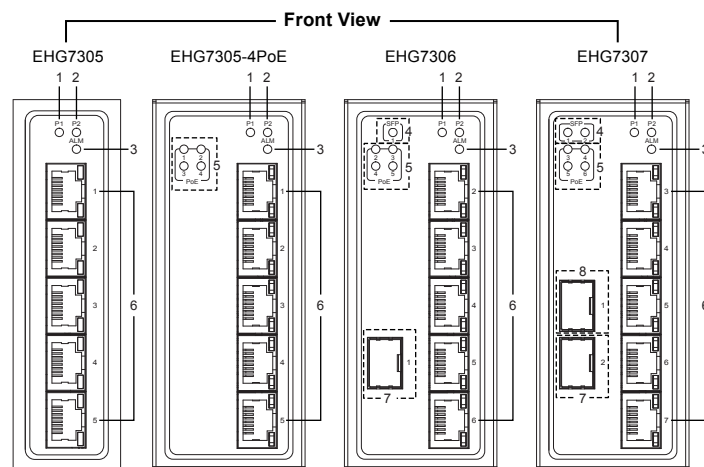
Package Check List

Inside the package you will find the following items:

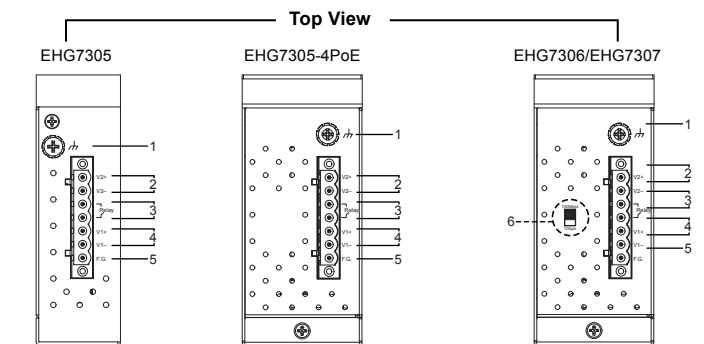
- Industrial Unmanaged Ethernet Switch x 1
- 7-Pin 5.08mm Lockable Terminal Block (Already mounted to the device) x 1
- DIN-Rail Kit (Already mounted to the device) x 1
- Protective caps for all SFP and PoE ports (Depend on purchased model)
- Installation Guide with Warranty Card x 1

- ⚠ 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. RESTRICTED ACCESS AREA: The equipment should only be installed in a Restricted Access Area.
- ⚠ Caution: CLASS 1 LASER PRODUCT. Do not stare into the laser!

Product Layout



- 1. PWR1 LED
- 2. PWR2 LED
- 3. Alarm LED
- 4. SFP Ports LEDs
- 5. PoE LEDs
- 6. 10/100/1000 BASE-X Ports and/or 10/100/1000 BASE-X PoE Ports
- 7. 100/1000 BASE-F(X) SFP Slot
- 8. 1000 BASE-X SFP Slot

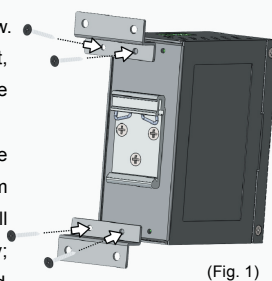


- 1. Grounding Screw
- 2. Terminal for Power 2
- 3. Relay Output with current carrying capacity of 0.5A@24 VDC (Normal Open)
- 4. Terminal for Power 1
- 5. Frame Ground
- 6. DIP Switch for SFP speed selection

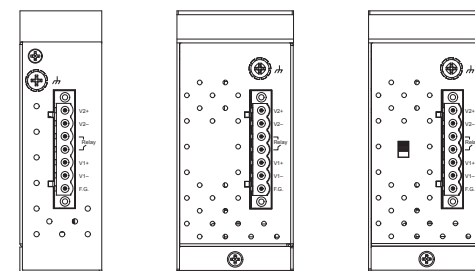
Installation Overview

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

1. If you have purchased the wall mount kit, proceed to place the screws on the back of the device as shown in (Fig. 1)
2. 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 with it 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 connected at all times) (Fig. 2~4).



(Fig. 1)



(Fig. 2)

(Fig. 3)

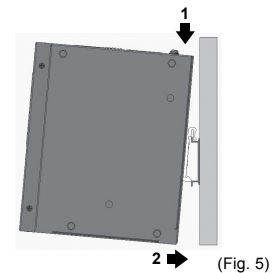
(Fig. 4)

3. You can then choose whether to plug in the I/O ports at this point or do it later depending on the actual location of the device or level of comfort for performing such operation. **Remember to plug in the protective caps for the unused SFP and PoE ports.**

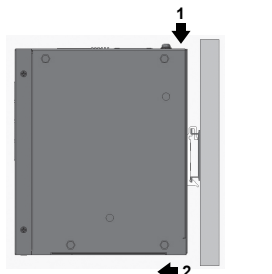
4. Once the plate has been firmly put in place, proceed to mount the whole device as shown in (Fig. 5).

Proceed to (Fig. 6) if you want to remove the device from DIN-Rail.

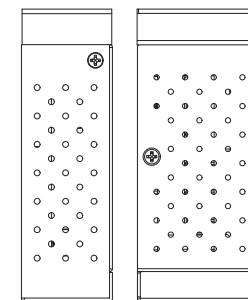
5. Next we can then proceed to connect the device to the LAN (switch or PC, depending on the case), take care on using the RJ-45 connector; after this we can then proceed to the device's settings.



(Fig. 5)



(Fig. 6)



(Fig. 7)

(Fig. 8)

- The opening to the sides are for the device's heat dissipation please never obstruct or cover them with any objects or try to insert them through it. (Fig. 2~4 & Fig. 7~8)


LED Indicators

Name	Color	Status	Message
P1	Green	On	Power is being supplied through this power input
		Off	Power is not supplied through this power input
P2	Green	On	Power is only supplied through PWR1 or PWR2
		Off	Power is supplied through PWR1 and PWR2 or device is not powered on
ALM	Red	On	Power is only supplied through PWR1 or PWR2
		Off	Power is supplied through PWR1 and PWR2 or device is not powered on
		Off	Power is supplied through PWR1 and PWR2 or device is not powered on
SFP	Green	On	Port is linked
		Blinking	Data is transmitting on this port
		Off	No data is transmitting on this port
PoE	Amber	On	Power is being supplied to a Powered Device (PD)
		Off	Power is not supplied to a PD
LAN	Amber	On	Ethernet is connected at 10/100Mbps
		Blinking	Data is transmitting on this port
		Off	Ethernet is disconnected
	Green	On	Ethernet is connected at 1Gbps
		Blinking	Data is transmitting on this port
		Off	Ethernet is disconnected

Attention

1. It is recommend to use at least 20 AWG cable and the cable needs to be resistant to at least 85°C on the power connector.
2. Torque applied to the Terminal block's screw should be 4.5 in. lb (0.51 Nm)
3. The device needs to be installed inside a Type 1 housing.


Slide Switch

	100Mbps
	1Gbps (Default)

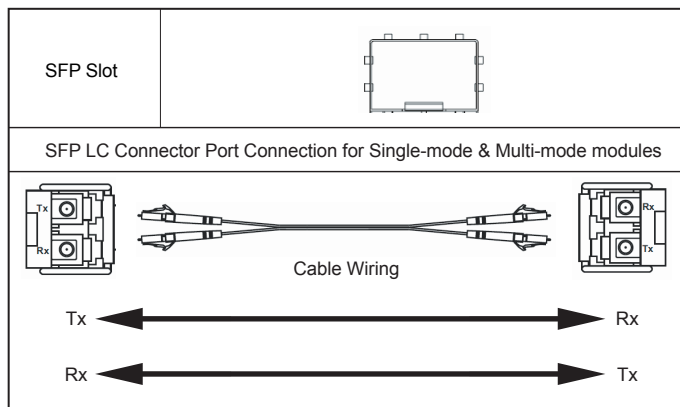
Note : Slide Switch only applies to EHG7306 Port 1 and EHG7307 Port 2.

Pin Assignments and Connections

10/100/1000BASE-T(X) Ethernet and PoE Pinouts

RJ-45								
10/100BASE-T(X)								
Pin	1	2	3	4	5	6	7	8
Signal	Tx+	Tx-	Rx+			Rx-		
1000BASE-T								
Pin	1	2	3	4	5	6	7	8
Signal	BI_DA+	BI_DA-	BI_DB+	BI_DC+	BI_DC-	BI_DB-	BI_DD+	BI_DD-
PoE								
Pin	1	2	3	4	5	6	7	8
DC	V+	V+	V-			V-		

100/1000 BASE-X Fiber Optics SFP Slot

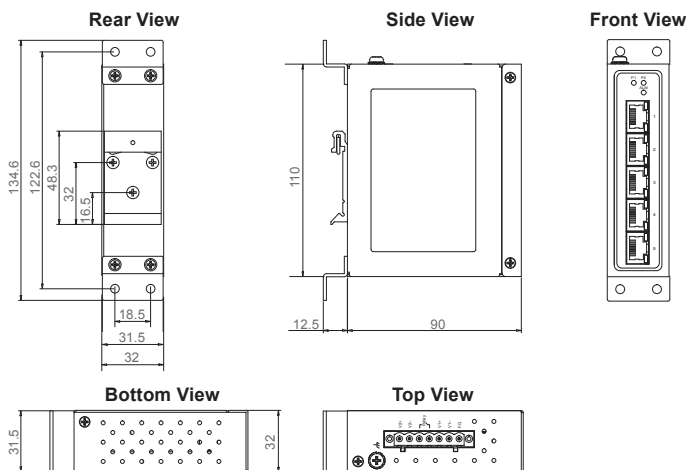


Caution

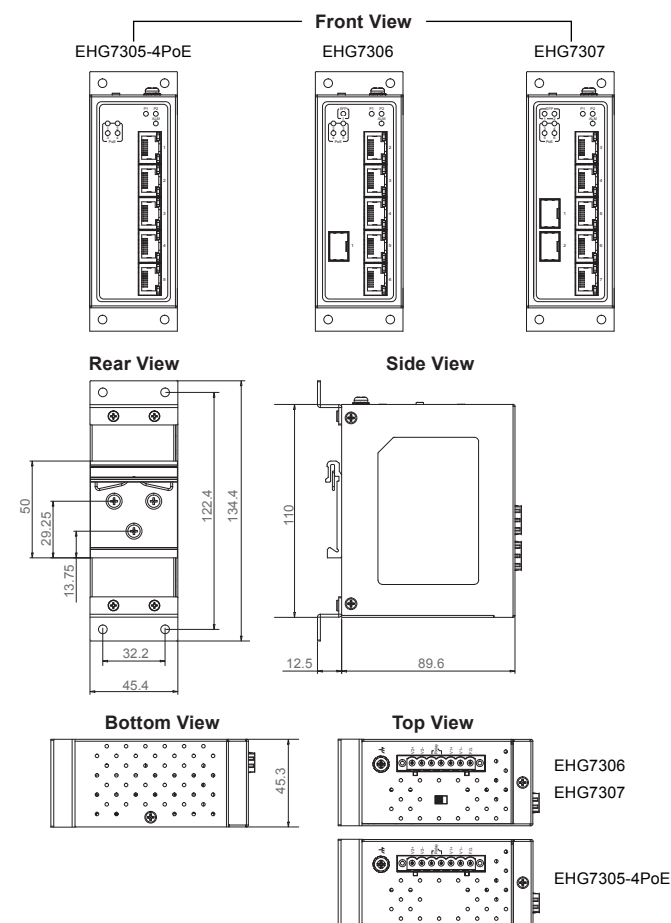
The SFP slot should be used in conjunction with a MSA compliant optical transceiver.

Mechanical Dimensions (Unit=mm)

EHG7305



EHG7305-4PoE / EHG7306 / EHG7307



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 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 you 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 on section of your User's Manual.

Power Requirements

Each device has two power requirements. For Non-PoE models, 12-52VDC SELV can be supplied to PWR1 and/or PWR2. For PoE models, 45-52VDC SELV should be supplied under 802.3af mode and 51-52VDC SELV should be supplied under 802.3at mode. The maximum system power consumption is 7.2W under DC input. Each PoE port will consume up to 15.4W (802.3af) or 30W (802.3at). Please add up the numbers and choose a power supply wisely.

Model Name	Power Rating
EHG7305	12-52 VDC SELV, 0.5A max. (No PoE)
EHG7305-1SFP	12-52 VDC SELV, 0.6A max. (No PoE)
EHG7305-2SFP	
EHG7305-4PoE	12-52 VDC SELV, 0.6A max. (No PoE)
EHG7305-4PoE-1SFP	45-52 VDC SELV, 1.5A max. (802.3af)
EHG7305-4PoE-2SFP	51-52 VDC SELV, 2.6A max. (802.3at)

ATEX Information

- Certificate No. : DEMKO 15 ATEX 1536X
-   II 3G Ex nA IIC T4 Gc
- Standards : EN 60079-0:2012+A11:2013, EN 60079-15:2010
- Ambient range: -40°C ≤ Ta ≤ +70°C
- Grounding wire minimum 3.31mm²
- Terminal Block:
 - Conductors suitable for use in an ambient temperature of 89°C must be used with the power input terminal.
 - One individual conductor in each clamping point.
- Condition of Safe Use:
 - The equipment shall be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
 - The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with EN 60079-15 and accessible only by the use of a tool.
 - Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value from the supply terminals to the equipment.
 - When end users are providing Optical SFP Communications modules, these must be limited to Laser Class 1 only.

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:

- Excessive forces or impacts
- War or an Act of God: wind storm, fire, flood, electric shock, earthquake
- Use of unqualified power supply, connectors, or unauthorized parts/kits
- 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

- 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)
- 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