Atop

Atop Technologies, Inc.

Industrial DIN-Rail Unmanaged Ethernet Switch

EH7310 series

10-Port Unmanaged Ethernet Switch
with Gigabit Uplink Ports

Hardware Installation Guide

Version 1.1
Updated on May 17, 2010

Introduction

Thank you for choosing the Atop Industrial DIN-Rail Unmanaged Ethernet Switch. The Switch delivers non-blocking, wire speed switching for your 10/100 and network clients and 1000Mbps for uplink, so all workstations will perform at their maximum speeds. This guide covers five product models:
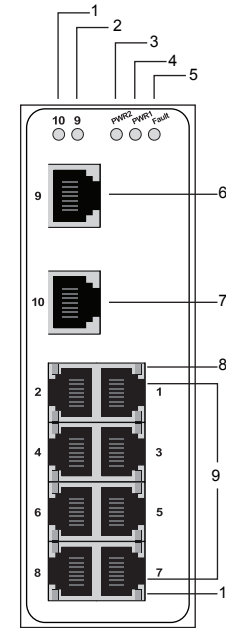
- EH7310-G: 10-Port Unmanaged Ethernet Switch with Gigabit Uplinks
  Includes 8 10/100Mb RJ-45 ports and 2 10/100/1000Mb RJ45 Uplink ports
- EH7310-2Fm: 10-Port Unmanaged Ethernet Switch with Multimode Optical Fiber Uplinks
  Includes 8 10/100Mb RJ-45 ports and 2 100Mb Multimode Optical Fiber Uplink ports
- EH7310-G-2Fm: 10-Port Unmanaged Ethernet Switch with Multimode Optical Fiber Gigabit Uplinks
  Includes 8 10/100Mb RJ-45 ports and 2 Gigabit Multimode Optical Fiber Uplink ports
- EH7310-2Fs: 10-Port Unmanaged Ethernet Switch with Single-mode Optical Fiber Uplinks
  Includes 8 10/100Mb RJ-45 ports and 2 100Mb Single-mode Optical Fiber Uplink ports
- EH7310-G-2Fs: 10-Port Unmanaged Ethernet Switch with Single-mode Optical Fiber Gigabit Uplinks
  Includes 8 10/100Mb RJ-45 ports and 2 Gigabit Single-mode Optical Fiber Uplink ports

Use the instructions in this Hardware Installation Guide to help you install the Switch. These instructions should be all you need to get the most out of the Industrial Harsh Ethernet Switch.

Inside the Package

- Main Product
  - Atop EH7310 Industrial Unmanaged Ethernet Switch x1
- Standard Accessories:
  - 7-pin Terminal Block (2ESDV-07P) x1
    Atop P/N: 50706491G
  - RJ-45 Port Plugs x4
    Atop P/N: 3990012G
  - SC Fiber Port Plugs x2
    (For EH7310-2Fm/2Fs and EH7310-G-2Fm/2Fs)
    Atop P/N: N/A
  - Hardware Installation Guide(Warranty card is included) x1
    Atop P/N: 89900365G
  - Grounding cable x1
    Atop P/N: 59906491G
- Optional Accessories
  - Wall mount kit x1 (2pcs)
    Atop P/N: 202EH731000003G
 - 7-pin Terminal Block (2ESDP-07P) x1
    Atop P/N: 50706551G

Product Description

EH7310-G
10-Port Unmanaged Ethernet Switch with Gigabit Uplinks

1. Green: Port 10 LED, Gigabit port
2. Green: Port 9 LED, Gigabit port
3. Green: Power input, PWR1 LED
4. Green: Power input, PWR2 LED
5. Red: Fault LED
6. Port 9: 10/100/1000 BaseT(X) port
7. Port 10: 10/100/1000 BaseT(X) port
8. Green LED: Switch is actively sending or receiving
9. Port 1~8: 8 ports of 10/100BaseT(X) with RJ-45 connector
10. Amber LED: Network speed is in full duplex transfer mode
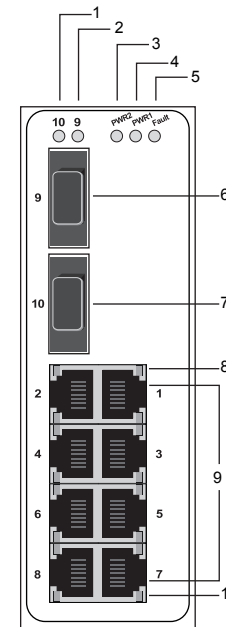
EH7310-G-2Fm / EH7310-G-2Fs / EH7310-2Fm / EH7310-2Fs
10-Port Unmanaged Fast Ethernet Switch with 100Mbps/Gigabit Single/Multi-mode Optical Fiber Uplinks

1. Green: Port 10 LED
2. Green: Port 9 LED
3. Green: Power input PWR1 LED
4. Green: Power input PWR2 LED
5. Red: Fault LED
6. Port 9: 1000BaseFX port
   (EH7310-G-2Fm / EH7310-G-2Fs)
   100BaseFX port
   (EH7310-2Fm / EH7310-2Fs)
7. Port 10: 1000BaseFX port
   (EH7310-G-2Fm / EH7310-G-2Fs)
   100BaseFX port
   (EH7310-2Fm / EH7310-2Fs)
8. Green: Switch is actively sending or receiving
9. Port 1~8: 8 ports of 10/100BaseT(X) with RJ-45 connector
10. Amber: Network speed is in full duplex transfer mode

Hardware Installation

- Electrical

Step 1: Unpack the Switch, check to make sure no external damages.
Step 2: Connect PWR3 power jack with the enclosed power supply. It is normal to see the FAULT indicator on because it is trigger by the absence of PWR1 and PWR2.
Step 3: Hook up one RJ-45 port to your LAN, and another port to your computer. Check to make sure your host computer can access the LAN.

Metal Spring

- Mechanical

All Ethernet Switches are equipped with a DIN-Rail bracket attached onto the rear panel. Follow the steps below to fasten the switch to the DIN-Rail.

Step 1: Tilt the unit slightly backwards.
Step 2: Fit the unit over top the DIN-Rail.
Step 3: Push downwards and against the DIN-Rail for locking.
Step 4: Check that the unit is locked into position.

LED Indicators

There are five LED indicators located at the front panel of EH series.

Name	LED	Status	Description
Fault	RED	Off	Everything is OK
		On	Something is wrong. It will be lighted if any power input fails, or any network port is broken
PW1/PW2	Green	Off	Power input 1/2 is not plugged yet
		On	Power status is ready
RJ-45	Green	Off	Link is broken, or no cable is plugged in
		Blink	The device is transferring data through the port
	Amber	Off	The link is operated at rate of 10 Mbps
		On	The link is operated at rate of 100 Mbps

Configuration and Setting Methods

Any settings or configuration is unnecessary.

Pin Assignment of Network Connections

10/100Base-T(X) Ethernet Port Connection

RJ-45								
Pin	1	2	3	4	5	6	7	8
Signal	Tx+	Tx-	Rx+			Rx-		

Cable type, Max. Transmission and Connector

Cable	Type	Max. Length	Connector
10Base-T	Cat. 3, 4, 5	UTP 100 m (328 ft)	RJ-45
100Base-TX	Cat. 5 UTP	UTP 100 m (328 ft)	RJ-45
1000Base-TX	Cat. 5/Cat. 5e UTP	UTP 100 m (328ft)	RJ-45
1000Base-SX	850μm, multi-mode	550m	SC
1000Base-LX	1310μm, single-mode	5 km	SC

100Base-Fx Fiber SC/ST Port Connection

	SC Connectors	ST Connectors
Fiber Port	Tx / Rx	Tx / Rx
	Single-mode	Multi-mode

100Base-Fx Fiber SC/ST Cable Wiring

ST Connector

TX	A	← →	B	RX
RX	B	← →	A	TX

SC Connector

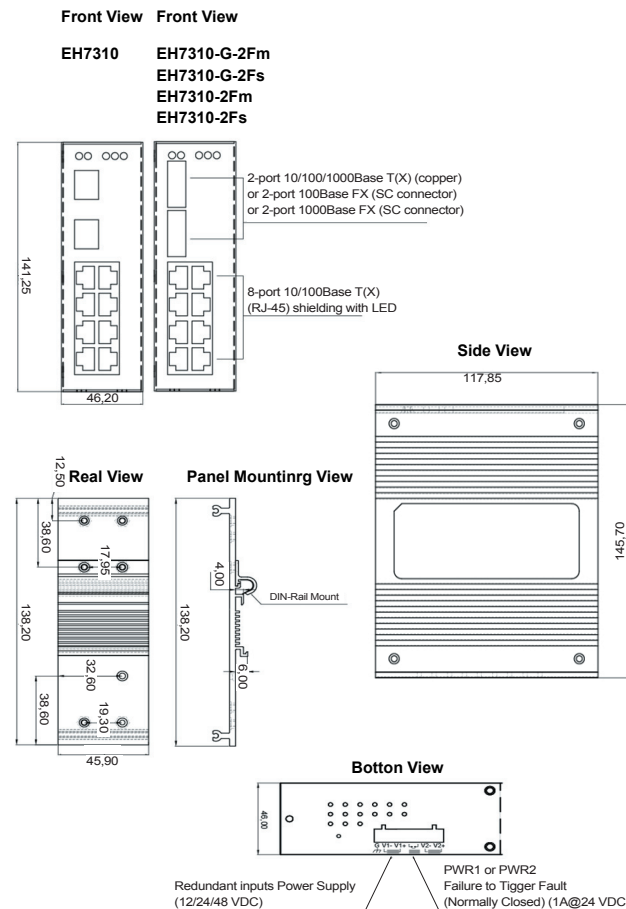| TX	A	← →	B	RX
RX	B	← →	A	TX

7-pin Terminal Block for Power Input

1. Grounding screw
2. Hardware Reset Button
3. Frame Ground
4. Terminal block for power input PWR1
5. Relay output warning for power failure and break alarm. Normally Closed.(1A@24VDC)
6. Terminal block for power input PWR2
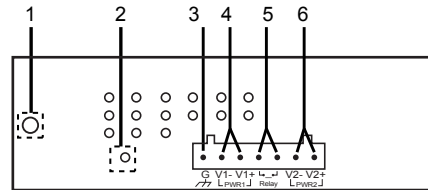
EH7310 series mechanical dimensions(unit=mm)

There are four LED indicators located at the front panel of EH series.

Front View — EH7310

Front View — EH7310-G-2Fm / EH7310-G-2Fs / EH7310-2Fm / EH7310-2Fs

2-port 10/100/1000Base T(X) (copper) or 2-port 100Base FX (SC connector) or 2-port 1000Base FX (SC connector)

8-port 10/100Base T(X) (RJ-45) shielding with LED

Side View

Real View

Panel Mountinrg View

DIN-Rail Mount

Botton View

Redundant inputs Power Supply (12/24/48 VDC)

PWR1 or PWR2 Failure to Tigger Fault (Normally Closed) (1A@24 VDC)

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 maintenance procedure
(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
Serial-to-Ethernet Server	5 Years
Serial-to WLAN Server	
Industrial Wireless Ethernet Device	
Modbus Gateway Series	
Industrial Ethernet Switch	
Embedded Serial Server	
Pick-to-Light System	1 Year
Auto-Identification and Data Collection-AIDC	

※ **Warranty coverage for accessories such as power adapters and high-gain antenna is one year.**

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

— **Any change by website in material announcement primarily.** —