

IW-3240H

Wi-Fi 7/HaLow AP/Bridge/Client

Quick Installation Guide

Overview

IW-3240H series Wi-Fi 7/HaLow AP/Bridge/Client solutions are designed for versatile industrial applications at harsh environment. The devices are equipped with high performance Wi-Fi 7 links and a Wi-Fi HaLow link for long distance/high penetration applications such as AIoT.

Package Checklist

Please verify the box contains the following items:

Item	Quantity
IW-3240H device	1
DIN-RAIL mounting bracket kit	1
DC power male terminal block	1
Digital I/O male terminal block	1
DB9 female connector to RJ45 console cable	1
SFP Ethernet port Dust cover	2
Antennas	Depends on models

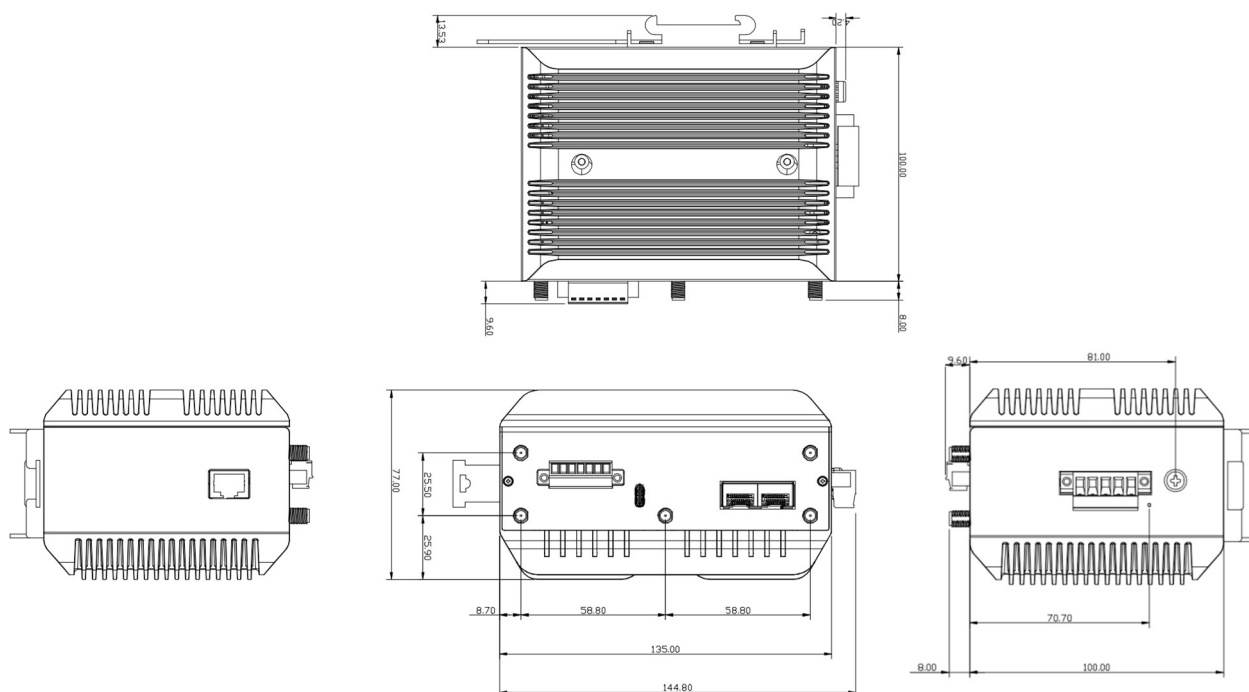
Technical Specifications

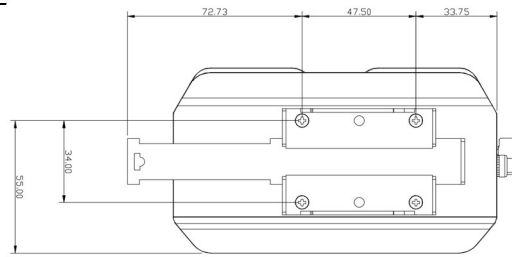
Wi-Fi 7	
RP SMA (Dipole)	2400 –2500 MHz / 1.45dBi, 5150 –7125 MHz / 3.89dBi
RP SMA (PIFA)	2400 –2500 MHz / 1.87dBi, 5150 –7125 MHz / 1.53dBi (OPTION)
IEEE 802.11ah	
SMA (Dipole)	902 –928 MHz / 0.8dBi
SMA (PIFA)	902 –928 MHz / 2.9dBi (OPTION)
Ethernet	
SFP (pluggable slots)	1000/10GBASE-X SFP+ slot, 2 slots in total

Power	
Power input	Redundant Input Terminals; Reverse power protection
Typical power input ratings	9.6 - 60 VDC, max. 2.8A
Maximum Power consumption	26 Watts
Environmental and Compliances	
Operating temperature	-40 to +70°C (cold startup at -40°C)
Storage temperature	-40 to +85°C
Humidity	5 to 95% RH (non-condensing)
Mechanical	
Ingress protection	IP30
Dimension (unit: mm) (without DIN rail clip)	135 (H) x 108 (D) x 77 (W) mm
Weight	Net 1.745g (Max.)
Installation option	DIN-Rail mounting, Wall mounting (optional kit)

Appearance

IW-3240H series

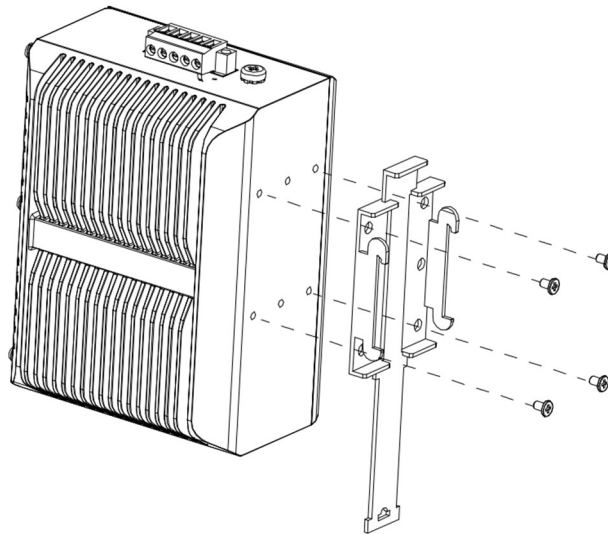




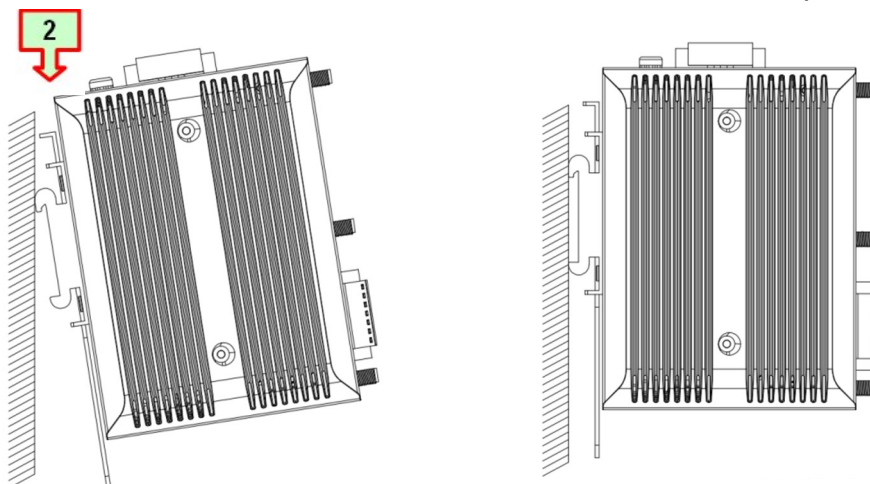
DIN-Rail Mounting

Mounting steps:

1. Screw the din-clip with screws in the accessory kit.



2. Hook the unit onto the din-rail.
3. Push the bottom of the unit towards the din-rail until it locks in place.



< This graph is for all series >

Ethernet Interface (Fiber, SFP)

For both 1G/10Gbps fiber speed connections, the SFP slots are available. The SFP slot complies with MSA standard and accepts the fiber or copper transceivers whose slot interface is serdes.

The fiber transceivers have options of multimode, single mode, long-haul or special-application transceivers.



DANGER:

Never attempt to view optical connectors that might be emitting laser energy.

Do not power up the laser product without connecting the laser to the optical fiber and putting the dust cover in position, as laser outputs will emit infrared laser light at this point.

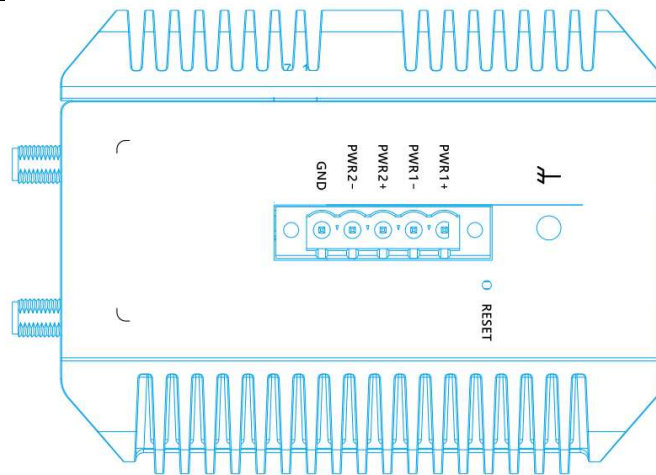
Connecting Power Terminal Block

The device can be powered from two power inputs (input range 9.6V – 60V). Insert the positive and negative wires (AWG 18-22) into V+ and V- contacts on the terminal block respectively and tighten the wire-clamp screws to prevent the wires from being loosened.



WARNING:

The DC power should be connected to a well-fused power supply.



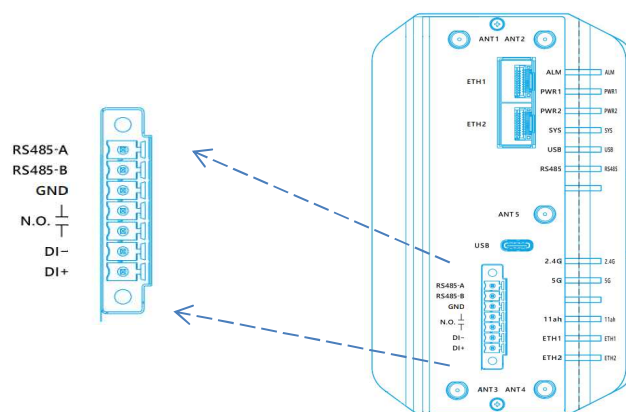
Alarm Relay and Ground

The alarm relay output contacts are in the middle of the DC terminal block connector as shown in the figure below.

The alarm relay out is “Normal Open”, and it will be closed when detected any predefined failure such as power failures or Ethernet link failures.

The relay output with current carrying capacity of 1.0A @ 24 VDC.

And, the switch must be properly grounded for optimum system performance.



Web Interface Initialization

Web Browser Support

IE 7 (or newer version) with the following default settings is recommended:

Language script	Latin based
Web page font	Times New Roman
Plain text font	Courier New
Encoding	Unicode (UTF-8)
Text size	Medium

Firefox with the following default settings is recommended:

Web page font	Times New Roman
Encoding	Unicode (UTF-8)
Text size	16

Google Chrome with the following default settings is recommended:

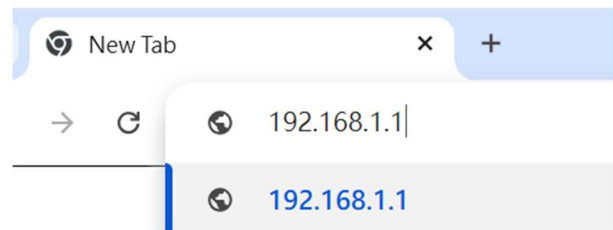
Web page font	Times New Roman
Encoding	Unicode (UTF-8)
Text size	Medium

Connect & Login

1. Make sure that the network interface of the PC/laptop which will connect with IW-3240H is

located in the 192.168.1.0 255.255.255.0 network.

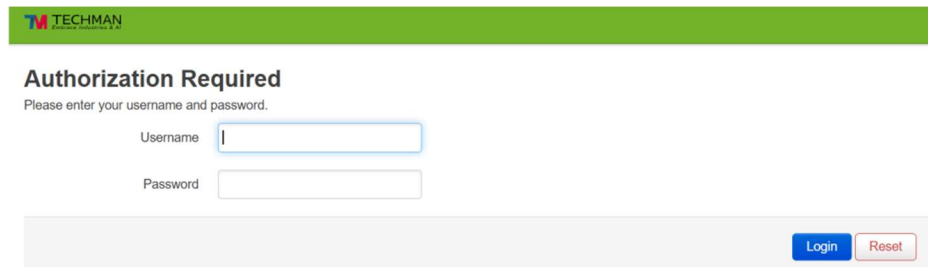
2. Invoke any web browser introduced as above. Visit the Web GUI of IW-3240H with IP address 192.168.1.1 as below illustration.



3. **Factory default IP of IW-3240H:**
192.168.1.1
4. Login with default account and password.

Username: admin

Password: admin



TECHMAN

Authorization Required

Please enter your username and password.

Username

Password

LED STATUS INDICATIONS

LED Name	Indicator /color	Condition
ALM	On Orange	A specified events occurs, such as power failure, port link down, ..., etc.
	Off	No any event
PWR1/PWR2	On Green	There are rated power input at PWR1 or PWR2
	Off	Power line disconnected or does not have power supplied
SYS	On Green	The device is ready to work
	Flashing Green	The device is performing firmware update
	Off	The device is not ready to work
USB	On Green	An USB memory stick is detected
	Flashing Green	Read/write USB memory stick
	Off	No USB memory stick is detected
RS485	Flashing Green	RS485 is transmitting/receiving data
	Off	RS485 is not transmitting/receiving data
2.4G	On Green	2.4G Wi-Fi is ready
	Flashing Green	2.4G Wi-Fi links up and there is traffic detected
	Off	2.4G Wi-Fi is not ready
5G	On Green	5G Wi-Fi is ready
	Flashing Green	5G Wi-Fi links up and there is traffic detected
	Off	5G Wi-Fi is not ready
11ah	On still Green	11ah is ready
	Flashing Green	11ah links up and there is traffic detected
	Off	11ah is not ready
ETH1	On Green	Ethernet port 1 links up but no traffic is detected
	Flashing Green	Ethernet port 1 links up and there is traffic detected
	Off	No any link on Ethernet port 1
ETH2	On Green	Ethernet port 2 links up but no traffic is detected
	Flashing Green	Ethernet port 2 links up and there is traffic detected
	Off	No any link on Ethernet port 2

Declaration of Conformity

Manufacturers Federal Communication Comm. Declaration of Conformity Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device is restricted to **indoor** use.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **20cm** between the radiator & your body.

This device contains FCC ID: S7Q-S04

Industry Canada statement:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

【法文】 L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This radio transmitter **[IC: 31309-P04]** has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types **listed below**, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna Type	Model Number	Antenna Gain(dBi)	Remark
Dipole Antenna	RFA-27-C57-U-B70-1	1.45	WiFi 2.4 GHz
Dipole Antenna	RFA-27-C57-U-B70-1	3.89	WiFi 5 GHz
Dipole Antenna	RFA-S1-C57-U-B70-1	0.8	HaLow
PIFA Antenna	RFA-J15-T379-5-3M	1.87	WiFi 2.4 GHz
PIFA Antenna	RFA-J15-T379-5-3M	1.53	WiFi 5 GHz
PIFA Antenna	RFA-J15-T379-5-3M	2.9	HaLow

Le présent émetteur radio **[IC: 31309-P04]** a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés

ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

This device is for indoor use only when operating in the 5150–5250 MHz frequency range.

【法文】 Cet appareil doit être utilisé uniquement à l'intérieur lorsqu'il fonctionne dans la gamme de fréquences 5150–5250 MHz.

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **20cm** between the radiator & your body.

【法文】 Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de **20cm** de distance entre la source de rayonnement et votre corps

CAN ICES-3 (A)/NMB-3(A)

This device contains IC ID: 31309-S04

NCC 警語:

IW-3240H

FCC ID: S7Q-P04

「取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。」

「應避免影響附近雷達系統之操作」

「警告:為避免電磁干擾，本產品不應安裝或使用於住宅環境。」

本器材需經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者

Safety Instructions

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

For repair or maintenance needs, please contact Techman directly.



The device can get hot to the touch after running at full load for some time. Please use caution when handling the device.

L'appareil peut devenir chaud au toucher après avoir fonctionné à pleine charge pendant un certain temps. Soyez prudent lors de la manipulation de l'appareil.

Power wiring information:

Use cable type - AWG (American Wire Gauge) 18-22 and corresponding pin type cable terminals.

Use torque value of 5 lb-in, do not use excessive force when fixing wiring.

The rating of the power wire used must be at least 105°C.

Informations de câblage d'alimentation:

Utilisez le type de câble - AWG (American Wire Gauge) 18-22.

Valeur de couple de 5 lb-in.

Le calibre du fil d'alimentation utilisé doit être d'au moins 105°C. 

DESTINÉ À ÊTRE UTILISÉ AVEC DES CONDUCTEURS EN CUIVRE SEULEMENT.

Si la méthode d'utilisation de l'équipement diffère de celle décrite par le fabricant, la protection assurée par l'équipement risque d'être altérée.

Contactez-nous pour l'entretien ou la réparation.

1. Professional installer:

This product is designed for specific application and needs to be in-stalled by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting

2. Installation location

The product shall be installed at a location where the radiating antenna can be kept 20 cm from nearby person in normal operation condition to meet regulatory RF exposure requirement. The installation applies to outdoor operation.

Please carefully select the installation position and the installation angle of antenna must be vertical to the ground. The violation of the rule could lead to serious federal penalty.

3. Installation procedure

Please refer to user's manual for the detail.

4. Warning :

Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.

This device is intended to be installed by professional personnel only. Improper installation may result in non-compliance with FCC/ISED regulations.