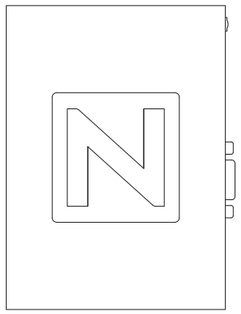
NOVAKON
HMI – Your Intelligent IIoT Gateway Solutions

Protocol Conversion Gateway

GW-01 Setup Manual

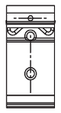
Package Checklist



GW-01 x1

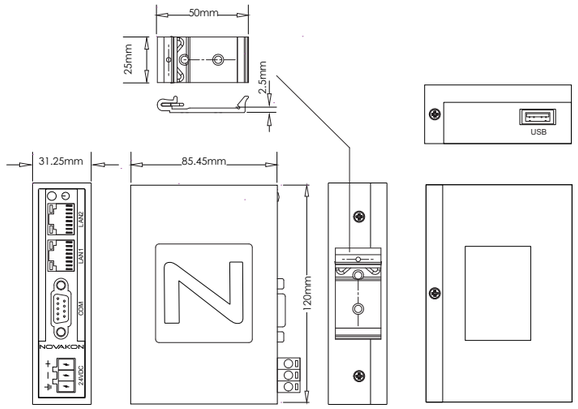
USB recovery drive

Plug-able power terminal x1



DIN-rail mounting kit x1:
25mm DIN-rail clip x1
M3x6mm flat Head Screw x2

Dimensions



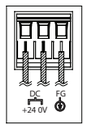
Power Connection

The device requires a power voltage of DC 24V (+/-20%). For a power consumption of 6W on the device, a power supply of 8W or above is recommended.

Importance Notice
It is recommended that the power plug must be connected to the device power terminal prior to connecting to the power source.

Power-connecting steps
1. Remove the power plug from the power terminal of the device.
2. Loosen the three screws on the power plug.
3. Strip the cable to expose the copper wire to about 7-8mm.
4. Insert the exposed copper wire into the three openings on the power plug.
5. Retighten the three screws on the power plug.
6. Plug the power plug back into the power terminal of the device.

Note
The power plug is included and already plugged into the power terminal of the device.



Power Line Type	Power Line (AWG)	Strip Length	Torque
Solid	28-12	About 7-8 mm	About 4.5lb-in
Stranded	30-12	About 7-8 mm	About 4.5lb-in

* with copper conduction wire only.

Grounding

In order to maintain the operational condition and functioning of the hardware components, please ensure proper power grounding.
Please ensure that the cable connecting the FG power terminal to the ground has a cable resistance lower than 100.

Warning

Please read this manual before continuing with installation or operation of the device.

General Guide
- Installation and operation of the device must be done by professionally trained staff.
- Installation of the device must follow the instructions as printed in this manual.
- Installation of the device must be kept away from the risk of any liquid or metal particles getting into the device. Foreign particles may cause internal components to short circuit and thus damage the device or even catch fire.
- Installation of the device must be kept away from the risk of corrosion, explosion, or heavy electronic and magnetic elds. It must also be kept away from high humidity and extreme shifts in temperature.

Power Supply
- The device is designed with an input power of DC 24V. If the supply voltage is outside of the DC 24V +/- 20% range, it may result in damage or malfunction to the device. Therefore, please confirm that the voltage is correct before powering the device on. Please also ensure that the supplied power is stable during device operation.

Installation:
- Please avoid placing communication lines in the same conduit as the power lines and high voltage lines. Isolated lines are suggested to reduce surrounding noise interference.

Service and Maintenance
- Please do not allow any non-trained staff members to perform the maintenance servicing.
- Please do not use batteries with poor quality.

Waste and Recycling
- Please adhere to local regulations when recycling device.
- The lithium battery, and capacitors contain hazardous material to individual health and local environment, and must be disposed responsibly.

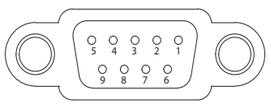
Product Specifications

Type	Protocol Conversion Gateway Series
Model Number	GW-01
CPU	ARM Cortex-A8 (1GHz)
SDRAM	512M Bytes
Flash Memory	4GB, 8bit eMMC
FRAM (non-volatile)	32K Bytes
RTC	CR2032 Replaceable
COM	1 x RS232 1 x RS422/485
Ethernet	2 x 10/100 Mbit
USB	1 x Type A (Host)
Power Input	24V ± 20 % DC , Isolated Power
Power Consumption	6W
Operating Temperature	-20 ~ 70°C
Storage Temperature	-20 ~ 80°C
Operation Humidity	10 ~ 90%RH non-condensing @40°C
Dimension (mm)	120.00(W) x 85.45(H) x 31.25(D) mm
Net Weight	0.25 kg
Gross Weight	0.42 kg

COM Port

The assignment of each pin and COM port varies from that of a standard PC. Please refer to the above table for signal connection and pin assignment.

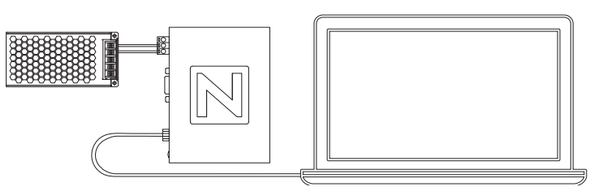
COM Port Pin Assignment：



Pin	COM
1	RS422 TX+ / RS485 TX/RX+
2	RS232 RX
3	RS232 TX
4	RS422 RX+
5	SG
6	RS422 TX- / RS485 TX/RX-
7	Optional TTL Level TXD
8	Optional TTL Level RXD
9	RS422 RX-

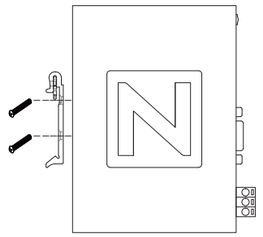
Preparation

Setup Requirement
1. GW-01 x1
2. Computer with ethernet port x1
3. DC24V power supply x1

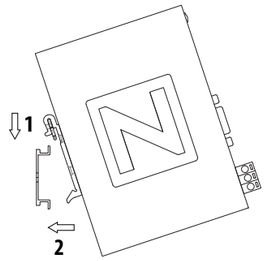


Installation Procedure

Step 1: Fasten the DIN rail clip to the Gateway with two screws



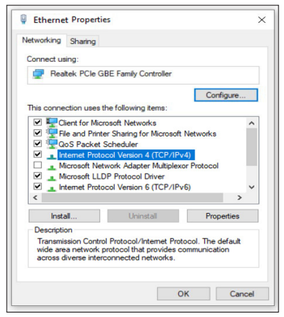
Step 2: Clip the device onto the DIN rail

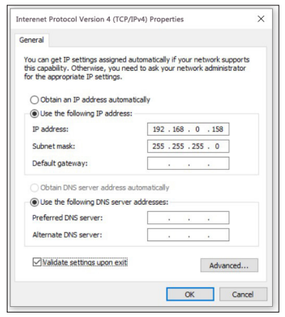


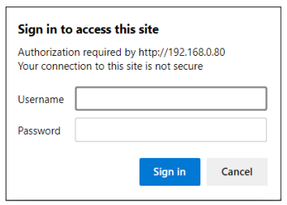
Accessing Your GW-01

First time accessing the GW-01, connect your computer to the default ethernet port [LAN1] of GW-01 with the default IP address http://192.168.0.80.

Change your computer's IP setting to be in the same network with GW-01, e.g., the default IP address of GW-01 is 192.168.0.80; computer IP address set as 192.168.0.xxx. If not necessary, do not change the default IP address of LAN1.



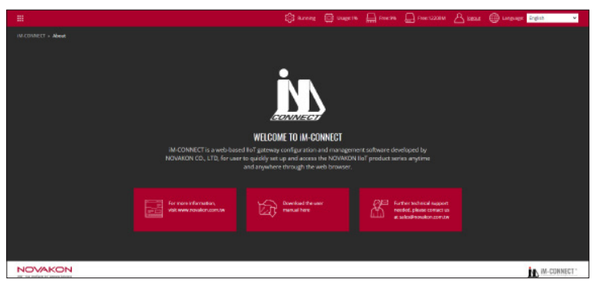




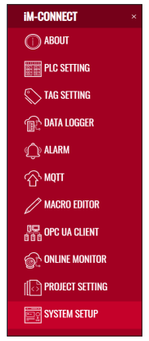
1. Open a browser and connect to http://192.168.0.80

2. Type the default username and password:
Username: admin
Password: 1234

3. Click [Sign In] and the configuration page is displayed



Configuring IP and Network Settings

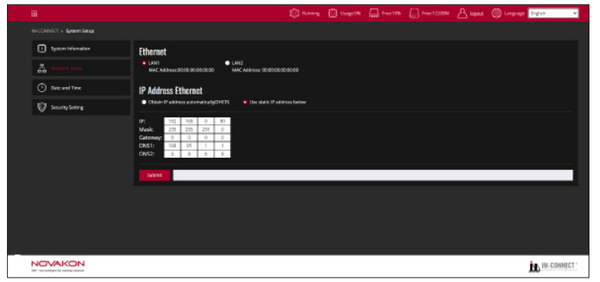


Click [ ] to view the [iM-CONNECT] menu. Click [System Setup].
Click [Network Setup] to configure Gateway's IP Address and Network Settings.

A. Ethernet
Configure the IP address, Mask, Gateway, and DNS of [LAN1] and [LAN2] respectively.

B. IP Address Ethernet
[Obtain IP address automatically(DHCP)] ：System automatically obtains IP addresses.
[Use static IP address below] ：Manually input the IP Addresses.

After configuration of each LAN, click [Submit] to save the settings to GW-01.



Reset to Default

If you forget the password or default configuration information, you can reset GW-01 to factory defaults. By plugging in the supplied USB recovery drive into the USB port on the GW-01 for a few seconds, it will be restored to factory configuration and reboot.

Note:
After reboot, wait 20 seconds before opening the browser

Additional Information

To download the detailed user guide of GW-01 and understand the supported PLC models, pay a visit to Novakon official website：https://www.novakon.com.tw

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