Quick Start Guide

VE2A01 Venation E2 IoT Gateway

無線智能物聯網閘道器

Venation E2 IoT Gateway provides Wi-Fi and Zigbee connectivity and IP networking capability for controlling and communicating with IoT sensors and IP devices. The gateway brings the most flexible wireless extensions as integrating different brands of wireless devices into an automated Modbus/TCP network.

Installation Prerequisites

Venation E series have GUI (Graphic User Interface) service for users to pair wireless devices, set up data conversion and regarding internet configuration. Please make sure the Venation E series and commissioning tool are in the same LAN (Local Area Network).

Material

- 1. Power supply (DSA-6PFG-05 FUS 050100)
- 2. Ethernet
- 3. Wi-Fi / ZigBee devices
- 4. PC or pad

Steps

Step 1

Power up.

Plug in the micro USB power supply

Step 2

Connect network.

Connect to your wired network by ethernet.

Step 3

Access GUI.

Access to Venation E GUI by web address with the last 6 digits of Mac address as <u>https://venatione2-xxxxx.local</u> (xxxxx are the last 6 digits of the Mac address. You could find the Mac address from the back label) Venation E series is a default DHCP client device, you also could use an IP scanner tool to access GUI by IP address on the browser.

i VenationE2-000030	
User Name	User Name: admin
User	
Password	Password: 1234
Password	
Login	

Pairing Devices

Page: Device Center > Devices > Zigbee

Click the "Add Device" to start the pairing process.

Venation E series will automatically discover un-pairing devices nearby.



Mapping Data Points

Page: Virtual Domain > Mapping Table

After devices paired, clicking "Auto Mapping" Venation E series could convert Zigbee endpoints into Modbus Register automatically.

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Save 2

Admin

<	Mapping Table					+ Add Entry	Auto Mapping
Device Center	Device D	ata Point	Conversion	Conversion	Data Point	Device	Delete
Virtual Domain	Zigbee Remote 🗸	remote3 Virtual On/O 🗸	no conve 🗸	no conve 🗸	400010-remote-remo [.] ❤	Venation Exported Mod	tb 🗸 📑
Mapping Table	Zigbee Remote 🗸	remote3 Virtual Level 🗸	no conve 🗸	no conve 🗸	400011-remote-remol 🗸	Venation Exported Mod	db 🗸 🗖
Device List							
Service	Zigbee Remote 🗸	remote4 Virtual On/O ∨	no conve 🗸	no conve 🗸	400012-remote-remo 🗸	Venation Exported Mod	
	Zigbee Remote 🗸	remote4 Virtual Level \checkmark	no conve 🗸	no conve 🗸	400013-remote-remo [.] ∽	Venation Exported Mod	ib 🗸 📋
	Zigbee Remote 🗸	remote1 Battery perc	no conve 🗸	no conve 🗸	300001-remote-remo [.] ∽	Venation Exported Mod	ib 🗸 🗖
	Zigbee Remote 🗸	remote2 Battery perc⊢∽	no conve 🗸	no conve 🗸	300002-remote-remo [.] ∨	Venation Exported Mod	ib ~ 📋
	Zigbee Remote 🗸	remote3 Battery perc⊢∽	no conve 🗸	no conve 🗸	300003-remote-remo [.] ∽	Venation Exported Mod	ib 🗸 📋

Edit Modbus Register Format

Page: Device Center > Devices > Export Device

This page lists automatically converted Modbus registers, click Pencil icon 🖉 to edit register format.

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<	Zigbee Export I	Device							
Device Center	Modbus Slave				⊕ Expo	rt Regi	sters	+ Add	Register
Devices	Name A	ddress PLC Address	Functions		Length	Unit	Scale	Edit	Delete
Virtual Domain	remote-remote4 Virtual On/Off Output, 0=off, 1=on	1 400012	Read Holding Registers	Write Single Register	1		1.0	0	8
Service	remote-remote4 Virtual Level Controllable Output,	2 400013	Read Holding Registers	Write Single Register	1		1.0	0	Ð
	remote-remote1 Battery percentage 0 remaining. Range	300001	Read Input Registers		1	%	0.5	0	8
	remote-remote2 Battery percentage 1 remaining. Range	300002	Read Input Registers		1	%	0.5	0	8

Network Configuration

Venation E series get IP settings automatically using DHCP, however you could set up static IP as per needs.
Page: Settings > Network

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Settings	
General Network User Management	Wifi Firmware Backup & Restore Syslog
Network Connection Type	
 DHCP Static IP Address IP Address 	
IP Address	
Subnet Mask	
Subnet Mask	
Gateway	
Gateway	
DNS	
DNS	
	Cancel Save



Venation E series get IP settings automatically using DHCP via Wifi
Page: > Settings > Wifi

Settings

General Network	k User Management	Wifi Firm	ware Backup & Restore	Syslog			
							Scan
SSID		BSSID	Cha	nnel Singal	Encryption	Action	
Ardomus Networks 1_2	.4G	E8:37:7A:87:15:E8	6	-26	Psk2	Connect	

Select your wifi SSID and key in password, then device will get IP from wireless.

Wifi	Firmware	Backup & R	estore	Syslog	
SID	Connect	to Ardomu	s Netwo	orks 1_2.4G	Enc
7:7A:87:15:E	Connec please v	ting to Ardom vait	us Netwo	rks 1_2.4G,	Psk2
0:BF:98:88:I	•••••				Psk2
1:97:06:E0:4	Cancel	Connect			Psk2
C:A3:EE:52:48			9	-50	Psk2

System				
Information	Logs			
		IP Address	192.168.11.4	
		IP Subnet Mask	255.255.254.0	
		Wi-Fi 2.4G Network Information		
		Wi-Fi Operating Mode	Client	
		MAC Address	30:9f:fb:00:0d:91	
		IP Address	192.168.11.15	
		IP Subnet Mask	255.255.254.0	
		SSID	Ardomus Networks 1_2.4G	
		Channel	6	

Safety Guidelines

The following guidelines help ensure your safety and protect the services gateway from damage. The list of guidelines might not address all potentially hazardous situations in your working environment, so be alert and exercise good judgment at all times.

- Perform only the procedures explicitly described in these topics. Ensure that only authorized service personnel perform other system services.
- Keep the area around the chassis clear and free from dust before, during, and after installation.
- Keep tools away from areas where people could trip on them.
- Wear safety glasses if you are working under any conditions that could be hazardous to your eyes.
- Do not perform any actions that create a potential hazard to people or make the equipment unsafe.
- Never install or manipulate wiring during electrical storms.
- Never install electrical jacks in wet locations unless the jacks are specifically designed for wet environments.
- Do not open or remove chassis covers or sheet metal parts unless instructions are provided in this guide. Such an action could cause severe electrical shock.
- Do not push or force any objects through any opening in the chassis frame. Such an action could result in electrical shock or fire.

- Avoid spilling liquid onto the services gateway chassis or onto any services gateway component. Such an action could cause electrical shock or damage the services gateway.
- Avoid touching uninsulated electrical wires or terminals that have not been disconnected from their power source. Such an action could cause electrical shock.

Federal Communications Commission (FCC):

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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For 2.4G WLAN, only channel 1 – 11 are operational. Selection of other channels is NOT possible.

IMPORTANT NOTE:

Radiation Exposure Statement:

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

EUROPEAN COMMUNITY (EC)

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with EU RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radio equipment and your body.

The maximum RF power operating for each band as follows:

The band 2,400–2,483.5 MHz is 99.66 mW (Wi-Fi)

The band 2,400–2,483.5 MHz is 16.60 mW (Zigbee)

National Communications Commission (NCC)

Warning Statement

第十二條

經型式認證合格之低功率射頻電機,非經許可,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。

第十四條

低功率射頻電機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。

前項合法通信,指依電信法規定作業之無線電通信。

低功率射頻電機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。

本機現在不干擾合法電台與不被干擾保障條件下於室內使用,本產品使用時建議應距離人體 20cm。