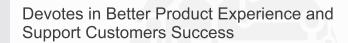


# **WECON IIoT Products and Solutions**

Better Team, Better Products, Contribute to Intelligent Manufacturing





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## **CONTENTS**

Contents & About WECON													0	١	1
------------------------	--	--	--	--	--	--	--	--	--	--	--	--	---	---	---

#### **WECON V-NET**

WECON V-NET&Gateway Features	13
WECON V-NET&Gateway Architecture · · · ·	)4
WECON V-NET&Gateway Functions · · · · ·	)5
Edge Computing · · · · · C	)6
Virtual Deployment · · · · · · C	7
Pass-through · · · · · · · (	8(

### **IIoT Gateway**

IIoT Gateway Hardware · · · · · · · · · · · · · · · · · · ·
Cloud Mode
V-BOX E Series Specifications · · · · · · · 11
V-BOX H Series Specifications · · · · · · 12
IOT HMI
IoT HMI Specifications · · · · · · · 14
V-BOX & ig HMI Installations · · · · · 15
Supported PLC Protocols 16

#### **IIoT Solutions**

Water and Fertilizer Integrated Pump	Station	٠.	٠		17	
Sewage Treatment Industry					18	



## Certificates







2020

Awarded as "National High-tech Enterprise" 2019

Awarded as "IIoT Demonstration Platform" 2018

Awarded as "Manufacturing Demonstration Industry in Fujian Province"

### **About WECON**

Wecon Technology is a high-tech company with the vision of "Better Team, Better Products, Contribute to Intelligent Man ufacturing", committed to providing users with cost-effective automation products and solutions. With the value of "Devotes in Better Product Experience and Support Custom ers Success", Wecon focus on product details and user experience, so as to help clients achieve greater success. Wecon's products lines cover Human Machine Interface(HMI), Programmable Logical Controller(PLC), Servo Controller, IIoT Gateway, Inverter, etc.

Since released in 2017, Wecon Industrial IoT Platform (V-NET System) has always provided remote operation for 10,000+ users and 100,000+ devices for unattended operation, device management, data Connectivity, and remote Commissioning.

Wecon has deployed V-NET servers in Bangkok, Frankfurt and Beijing, which truly realizes that "no matter where the user or device are, clients can enjoy globalization and convenient Industrial Internet services. Wecon IIoT gateway (V-BOX) passed the evaluation of smart gateway connectivity capabilities by the NISDR Center. V-BOX is a smart gateway that connects the device and the IIoT platforms.

# Cooperation Platforms

















## **WECON V-NET**

## **WECON V-NET&Gateway Features**

#### Remote Operation

All Under Control

WECON V-BOX and PI3000ig series IoT HMI transmit the data obtained from mechanical equipment to WECON V-NET. No matter how many devices there are, you can "bring them all in one platform." By using the V-NET APP, you can easily get Unattended Operation, Device Management, Remote Commissioning and Data Connectivity.

#### **Device Management**

Even if there are thousands of devices, you can quickly locate them by mapping on V-NET. V-NET's Device Template frees you from repeated parameter configuration and V-NET's Role Management allows you to hand-over the management of the devices to employees with safety.

#### **Data Connectivity**

WECON V-NET integrates OPC Tool and HTTP API, which conveniently provides data access for third-party systems such as ERP, SCADA, MES, etc.

#### **Unattended Operation**

V-NET presents on-site data truly and objectively, so that staff do not need to be on-site.

#### **Remote Commissioning**

Remote commissioning and downloading of PLC and HMI projects.

#### **Data Collection**

#### Connect Devices to IIoT platform

Wecon V-BOX Cloud Mode is able to build communication with 300+ various PLC types, and connects to platforms by HJ212 protocol, MQTT, OPCUA (in developing), etc. Lua script can easily achieve the description of protocol and assist the connection between devices and platform by simple configuration of monitoring points. The V-BOX in Cloud Mode is the universal IIoT gateway for various industrial IoT platform connecting on-site data. V-BOX can establish a simple efficient and real-time communication bridge between IoT platform and devices.

#### System Integration

#### Large Screen Display, Interconnection Between Devices

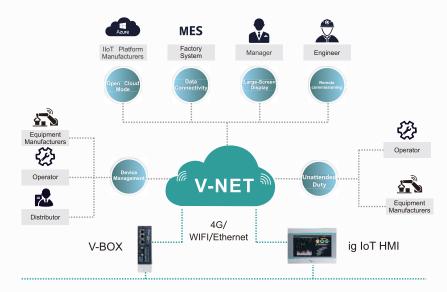


With the fast development of the IIoT, users have higher requirements for automation system integration projects. The on-site data collected by WECON V-BOX can help users to perfectly display the overall status of the project through large-screen display maps, Cloud SCADA, etc., so that the overall situation can be seen on one screen

Even if multiple projects are far away in space, as long as these projects are using V-BOX and V-NET, then the data mapping function of V-NET can also help devices locates differently work coordinately and share data with each other.

## **WECON V-NET**

### **WECON V-NET&Gateway Architecture**



















Smart Greenhouse

Sewage Treatment

**HVAC** 

Packing Machine

Environmental Protection Equipment

Aquaculture Equipment

Oxygen Generating Equipment

Woodworking Machine

#### **Five Major Measures to Ensure Security**



#### **Hardware Security**

To Identify and reject unauthorized access requests to prevent the gateway hardware from being illegally copied. To Confirm the control request sent by the platform to ensure the safety of device communication.



#### **Platform Security**

To prevent unauthorized devices & users from accessing the platform; To prevent user data from being used or accessed without authorization.



#### **Access Security**

To block user operations which is improper or probably caused dangerous; To verify user ID and remind users to protect personal information.



#### Communication Security

To prevent communications proactively from being eavesdropped and hijacked, and to avoid leakage of user information.



#### **Data Security**

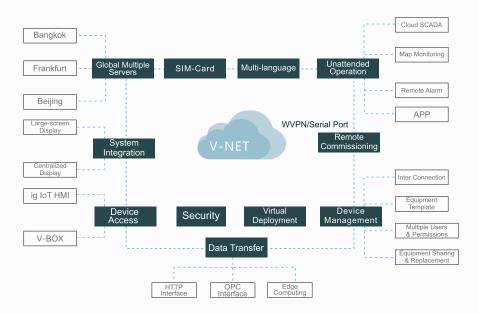
To use the world's top cloud server providers such as Huawei or Amazon. WECON promises not to use or share user data.





## **WECON V-NET**

## **WECON V-NET&Gateway Functions**



### **Device Management**

#### All in One

To locate the devices accurately through map index, category search, fuzzy search, etc.

#### One-key Configuration

To download and modify the configuration of the V-BOX of the same model by using the template function.

#### Role Management

Managers can assign V-NET permissions to users at the corresponding levels by establishing users at various levels (4 levels in total), no matter how many devices there are, they could be managed by one person.

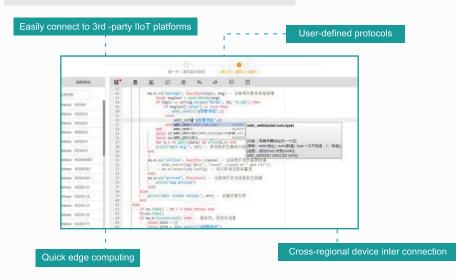
Global Servers							
Server Location	Providers	Country or Region					
Beijing	HUAWEI CLOUD	China					
Bangkok	HUAWEI CLOUD	Southeast Asia, East Asia and Oceania					
Frankfurt	Frankfurt AWS by Amazon Europe, America, Middle East and Indi						
	Multi	lingual					
User- suppe	<ul> <li>Chinese &amp; English for main interface;</li> <li>User-defined three kinds of languages supported in project of Cloud SCADA;</li> <li>Languages switchable.</li> </ul>						

## **WECON V-NET**

## **Edge Computing**

Edge Computing —— Powerful Lua

Easy to study, flexible for using and high efficiency.





#### Easy Programming

- Online editor, Online programming without local IDE;
- Auto follow script, more faster;
- Online analysis tools, grammar tips;
- Rich functions for mathematics and data processing.



#### **Multiple Execute Methods**

- Multiple execute methods;
- Remote synchronization and local execution;
- Online configuration;
- Execute locally.





## **WECON V-NET**

## **Virtual Deployment**

Users of virtual deployment can customize an exclusive tool kit for V-NET. Tool kit includes: exclusive domain name, company logo, customized APP and others. Users can use all functions of V-NET through this tool kit.

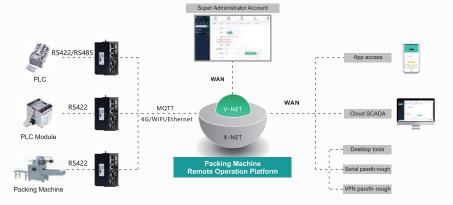
Items	V-NET	V-NET Virtual deployment		
Platform Name	V-NET System	Make your own name		
Domain Name	www.v-box.net	Make your own domain name		
APP and Desktop tools	APP and desktop tools with WECON Logo	Customizable Logo and appearance		
User Access	Users registered under V-NET	Users registered under your domain name		
Cloud SCADA, Passthrough and Gateway Management	Same with V-NET users			
User Level and Rights Management	Same with V-NET			
Device Templates ( Developing)	Same wi	th V-NET		
Gateway Bind	Same wi	th V-NET		
Gateway Name	V-BOX	Make your own name		
Gateway Model	V-BOX H Series, E Series Make your own name			
Super Administrator Account	N/A	YES		

### **V-NET Virtual Deployment Privileges**

Free Cloud Charge	No additional cloud services cost are required
Easy Deployment	Can be used after simple configuration
Free Maintenance	WECON is responsible for platform maintenance and upgrade
Platform Naming Rights	Rights of naming your own cloud platform
Direct Access	Users access cloud platform through your own domain name
Logo Display	Your company Logo display
Super Administrator Account	Administrative rights for the users under the platform with deactivated, enabled, supervised and so on
Model Rename	Rename and define V-BOX model by yourself

#### **V-NET Virtual Deployment Case**

A company, a packaging machinery manufacturer, need an IoT platform for their products through V-NET virtual deployment. They can enjoy the service without maintenance charge, and importantly to improve their factory efficient and services.



## **WECON V-NET**

## **Remote Pass-through**

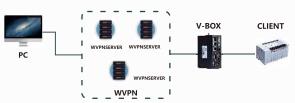
Machinery and equipment products are sold throughout the country or even worldwide. In order to facilitate transportation and packaging, some machinery needs to be disassembled and then installed again in the factory. And also, most of the machines need on-site parameter debugging after installation, so the manufacturers have to send their own electrical engineers to the site for machine commissioning. But pass-through function makes it possible for PLC remote commissioning through V-BOX.

### **Remote Serial Port**



#### **WECON WVPN**

The principle is to construct a secure and stable virtual private network (VPN) between computer and PLC. It allows programming software to pass the obstacles of gateway and router to realize direct communication with PLC.



#### ■ High Security of WVPN

- All data transmission channel is encrypted by SSL/TLS;
- Mutual certificate authentication(PC, WVPN SERVER and V-BOX digital signature and certificate mutual recognition);
- All Valid certificates to ensure the maximum security;
- Independent between Devices: All pass-through devices are not visible to each other;
   Dynamic Passthrough Principal: Users can set their own pass-through rules to prevent from malicious use;
- Blacklist and Whitelist: Guarantees the independence, security, and manageability of each device.

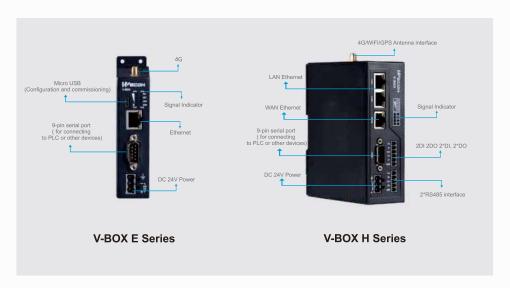
Global Servers



WVPN has servers deployed in Beijing,Bangkok, and Frankfurt (Will deploy more servers in the world in the future). It allows users to select the fastest WVPN SERVER worldwide, WECON will spare no effort to build high availability for WVPN remote pass-through.



### Hardware



#### **Protocols**

300+ protocols of Ethernet or serial ports PLC

#### Installations

DIN guide rail or screwing installations

#### **Built-in Digital Input and Output**

2\*DI & 2\*DO relay (H Series)

#### **Pass-through Function**

VPN penetration, serial port, PLC remote debugging or download

**Interfaces** 3 serial ports (4 in 3), 3 Ethernet ports, WIFI(Optional) (H Serial V-BOX only) are standard;

RS485/RS232/RS422; 4G(Optional) and GPS position(Developing).

#### **Quick Access**

Connect to V-NET easily by plugging in network cables or IoT SIM card

#### **Indicators**

Connection 4G Signal Intensity PLC Communication Status Prompt

#### **Edge Computing**

Simple logic control could be realized by built-in Lua Script.

#### **Open Cloud Mode**

V-BOX can be connected to third-party platforms through Open Cloud Mode.

## **Industrial IoT Gateway**

## **Open Cloud Mode**

#### Who Need Open Cloud Mode?

MES Manufacturers: V-BOX provides solution for MES system connectivity. **IoT platforms:** V-BOX provides remote connection for various IIoT platforms. SCADA systems: V-BOX provides data acquisition for SCADA systems.

#### What Can V-BOX Open Cloud Mode Do?

#### **For Platform**

V-BOX connect to IIoT platform over MQTT through easy built-in Lua scripts of V-BOX.







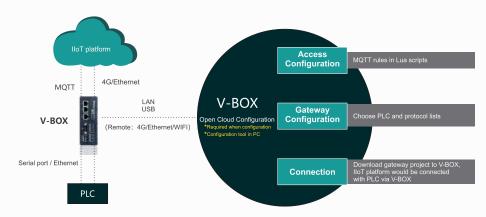


IoT platform supported. More platform coming soon...

#### **For Devices**

V-BOX supports most branded PLC protocol, which to connect PLC and platform. Supports over 300 branded PLC protocols

### **HOW V-BOX Open Cloud Mode Work?**







## **V-BOX E Series Specifications**

### General



G	enerai					
	Model	E-00		E-4G		
	Item		Specifications			
	CPU	ARM 9				
	Flash	128MB				
Storage	RAM	DDRII 64MB				
	SD Card		N/A			
	USB		OTG: USB HOST/USB DE	/ICE		
I/O	Serial Ports	C	OM1: RS232, RS422/RS485	5 (2 in 1)		
Ports	Ethernet		1 Ethernet Port			
1 0113	WIFI Module		N/A			
	4G Module	N/A		4G		
Power	Power Supply		24V DC (12~28V DC)			
1 OWCI	Power Consumption		< 10W			
	Enclosure	Cold-rolled steel sheets				
Dimension	Dimension (W*H*D)	101.0mm*73.2mm*26.8mm				
Dimension	Wall Hanging Dimension		110.0mm*15.6mm			
	Weight (KG)	0.26				
	Vibration Resistance	IEC61131-2 Standard				
Environment	Storage Temperature	-20℃~70℃				
Liviloiiiioii	Working Temperature	-10℃~60℃				
	Relative Humidity	10~85%RH (Non-condensing)				
С	E Certification	CE Marked				
FC	CC Certification	FCC Class A Marked				
Real-tim	ne Monitoring Points	200		250		
Alarm	Monitoring Points	50		100		
History	Monitoring Points	20		50		
History Sto	orage/Storage capacity	60 Days/1 Mil	llion	90 Days/1 Million		
Norn	nal Pass-through		YES			
WVF	PN Pass-through		N/A			
Ec	lge Computing	N/A		YES		
/	API Interface		YES			
R	emote Update		YES			
Configuration download / upload		YES				
Off-li	ine Transmission		YES			
	GPS	N/A		LBS		
		E-4G model freq				
LTE FO		LTE TDD	WCDMA	GSM		
B1/B3/B5/B8 B34/E		338/B39/B40/B41 B1/B5/B8		900/1800MHz		

Remark: You could contact us for confirmation before purchase.



## **Industrial IoT Gateway**

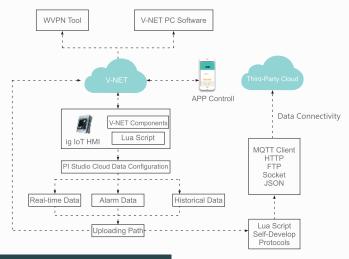
## **V-BOX H Series Specifications**



Ge	eneral							
IV	lodel	H-00	H-WF	H-4G	H-AG/H-SG			
	Item		Specific	ations				
	CPU	Cortex A7						
Storage	Flash	128MB						
Storage	RAM		DDRIII	128MB				
	USB		HOST/DEVICE: U	JSB OTG Switch				
	Serial Ports	RS	COM1: RS232, RS 485(2 in 1) 【COM2: R	422/RS485 (2 in 1)	)			
I/O	Ethernet		3 Ethern					
Ports	WIFI Module	N/A	YES	N/A	N/A			
	4G Module	N/A	N/A	4G	4G (Global)			
	I/O	2 i	inputs with optocoupler	isolation; 2 relay output				
	Power Supply		24V DC (12					
Power	Power Consumption		<10					
	Enclosure		PC+A					
Dimension	Dimension (W*H*D)	131.0mm*100.5mm*46.0mm						
	Weight (KG)	0.3						
	Vibration Resistance	IEC61131-2 Standard						
	Storage Temperature	-20°C~70°C						
Environment	Working Temperature	-10°C~60°C						
	Relative Humidity	10~85%RH (Non-condensing)						
CF	Certification	CE Marked						
	Certification	FCC Class A Marked						
	Monitoring Points	300	300	500	600			
	Monitoring Points	200	200	300	300			
	Monitoring Points	50	50	100	100			
	age/Storage capacity	90 Days/1 Million		180 Days/1 Million				
	al Pass-through	YES						
	N Pass-through	YES						
	e Computing	YES						
	PI Interface	YES						
	note Update	YES						
	on download /upload	YES						
	e Transmission	YES						
GPS		N/A		LBS	LBS/GPS			
	0.0		requency code	LDO	LBS/ GFS			
LTE FDD	LTE TDD	TD-SCDMA	WCDMA	CDMA	GSM			
B1/B3/B5/B8	B34/B38/B39/B40/B41	B34/B39	B1/B8	BC0	900/1800MHz			
		H-AG model	frequency code		0011			
B1/R2/R3/R	LTE FDD 4/B5/B7/B8/B12/B13/B18/ B1	9/B20/B25/B26/B28	LTE TDD B38/B39/B40/B41	UMTS B1/B2/B4/B5/B6/B8/B19	GSM B2/B3/B5/B8			

## ig Series IoT HMI

Based on basic function of HMI, ig HMI is a new IoT HMI which could be connected with V-NET. HMI project could be programmed by PIStudio, including general HMI functions. At the same time, ig HMI can also be connected to V-NET after configurating locally. Users can manage ig HMI and V-BOX indiscriminately through V-NET. In this way, ig HMI can use V-NET functions such as: Device Management, Alarm Notify, Data Record on cloud, Cloud SCADA, APP, etc.



#### ig IoT HMI with All Functions of PI HMI

- ig IoT HMI has all the common functions of PI series HMI;
- Richer library: switches, buttons, indicator etc.;
- Powerful VB script and Lua script, self-develop protocols, edge computing;
- More stable and faster data-logging;
- Large number of protocols and library.

#### **Easy Access to V-NET**

- Alarm data and important messages can be pushed to WECHAT public account(Chinese only) or specified email address;
- To upgrade the firmware of ig HMI by V-NET;
- To update the configuration project of ig HMI remotely by V-NET PC tool;
- The real-time data of ig HMI can be presented as Cloud SCADA on V-NET, and can also be combined with other HMI or V-BOX's data to form a new SCADA projects;
- Device Management, Multi-Users Management, Map monitoring, etc.

#### Remote Access to HMI's Local Screen

- To design ig series HMI by using PI Studio, easy to copy and paste by other existing HMI projects;
- Default with Ethernet port, optional for 4G/WIFI;
- Remote access to ig HMI screens on V-NET or APP.

## **Industrial IoT Gateway**

## ig IoT HMI Specifications

### General

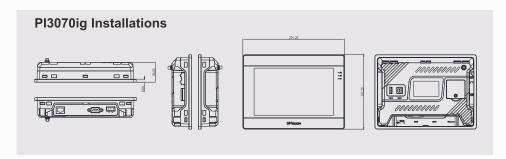


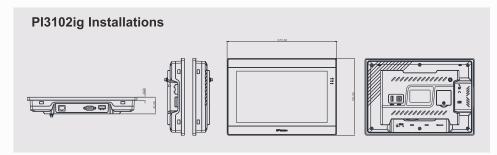
Model	PI3070ig	PI3102ig

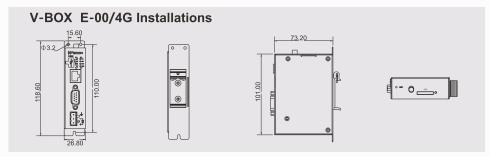
	Item		Specifications			
	CPU		Cortex A35			
To	ouch Scre	en	High precision four-wire resistive			
	Sc	creen Size	7 Inch	10.2 Inch		
	Resolution		800*480	1024*600		
Display	В	rightness	250 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>		
Display	Backlight Type		LED			
	Backlight Life Time		50,000 Hours			
		Colors	16,000k	colors		
		Flash	128	MB		
Storage		RAM	DDRIII	128MB		
	:	SD Card	YE	S		
		USB	USB Host 2.0 x 1,	USB Client 2.0 x 1		
	Serial		1 Physic	cal Port		
I/O	Port	COM1	RS232, RS422 / RS	485 (2 in 1), RS485		
Port	Foit	COM2 COM3				
Port		Ethernet	YES			
		CAN	N/A			
	4G /	WIFI Module	Optional			
Perm	anent Ca	lendar	Built-in			
Power	Po	wer Supply	24V DC (12~28V DC)			
Fowei	Power	Consumption	< 15W			
	Е	nclosure	PC+ABS			
Dimension	Dim	ension(mm)	201.2W*147.2H*39.0D	272W*191H*41.5D		
Dimension	Mount	ing Size (mm)	192.0W*138.0H	260.0W*179.0H		
	W	eight (KG)	0.52	1.02		
	F	rotection	IP65 (Fro	nt panel)		
Environment	Te	mperature	Storage: -30 °C~70 °C;	Working: -10 ℃~60 ℃		
LITTIONNEN	1	Humidity	10 ~ 90%RH (N	on-condensing)		
	Vibrati	on Resistance	10 ~ 25 Hz (X, Y, Z direction 2G/30 minutes)			
CE	Certifica	tion	CE Marked			
FC	FCC Certification		FCC Class A			
Progra	Programming Software		PI St	udio		
			Real-time Monitoring Points: 100			
	IoT Service		Alarm Monitoring Points: 20			
Software	(	Optional)	History Monitoring Points: 50			
			History Storage: 60 days /1 millions			
	VPN	Pass-through	YE	·		

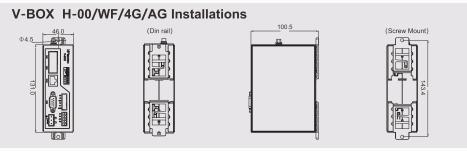
## V-BOX & ig HMI Installations

Unit:mm









## **Industrial IoT Gateway**

## **Supported PLC Protocols**

Brand	Series	Brand	Series				
АВВ	АВВ	Rextonth	Rexroth VFC-x610				
Yamatake	CPL	Koyo	Koyo_K, Koyo Direct				
REGIN	REGIN	Shinko	CxT Series, DCL Series, PC-900				
Panasonic	FP Series IEC60870 -5-104 IEC60870-5-104 Client						
YD	YUDIAN All Series Instrument	PRINTER	SP, WH, RD, EPSON-TM, TSPL				
Yokogawa	FA-M3 Series	YASKAWA	Ns600 M, SERVOPACK SGDM				
VIGOR	VIGOR All Series PLC	INOVANCE	H1u Plc, H2u Plc, H3u Plc				
RKC	Rkc_CDCH	Fuji	SPB, Fuji Transducer, SPE_SX				
IDEC	FC4A-C10R2	INVT	IVC1, IVC2L, IVC2H, GD10, GD800				
Facon	Facon FB Series	SHIMADEN	MR13, SR90/SR91/SR92/SR93, FP23				
Emerson	Emerson 984	Keyence	KV1000, KV-700/3000/5000, KV_16DT				
Brand	Series						
WECON	LX1S, LX2N, LX2V, LX2E, LX3V, LX3S, LX3VP, LX3VM, LX3VE, LX5V						
ModBus	ModBus RTU , ModBus ASCII , Modbus TCP						
FATEK	FBs Series, FBe Series, FBn Series, FSDE2(485), FIDE1, FIDN1, FIDS1						
Siemens	S7-200/Smart, S7-1200, S7-1500, S7-300 + CP343 module, Logo! Series						
Schneider -Electric	Twido ModBus, Modicon ModbusRTU, Schneider_TELV	VAY,					
OMRON	CP Series、CQM1 Series , CS1(CP1E/CP1H), CV/CJ1M/C	CS1H, NX, E50	cc				
LG	K120S, K300S, XGB, Inverter(LG-BUS ASCII), MASTER	-K CNet, XBC,	XGK , GLOFA FEnet				
Delta	EH/ES/SS/EX/EH2/SV/SA/SC/SX, AS300, ES2/EX2/SS2/	SA2/SX2/SE					
Mitsubishi	FX1s\FX0n, FX1N , FX2N , FX3U/3G/3SA , L02 , QJ71	E71 , L02 CPU	, FXSU				
Xinjie	ModBus RTU Slave(All Fuction), ModBus RTU Master, ModBus TCP Slave(All Fuction), ModBus TCP Master, ModBus (ASCII) Slave, ModBus ASCII Master, ModBus ASCII TCP Slave, ModBus ASCII TCP Master, ModBus RTU Slave(ETH)						
Allen -Bradley	MicroLogix 1000/1200/1400/1500, SLC 5/03 5/04 5/05 PLC-5, Allen-Bradley DF1, CompactLogix 1769 Series						
Taian	BSP, L510, A510S, F510, S310+, A510, E510, S3/E3/N3, JSDAP/JSDEP, AP-100, AP-200, AP-300, TP01/02/03						

## **IIoT Solutions**

## **Intelligent Water and Fertilizer Intergrated Pump Station**

#### Background

Water and Fertilizer Intergrated is a new agricultural technology that integrated management of irrigation and fertilization. It is based on pressure system to mix solid and liquid fertilizers, according to the soil nutrient content and the fertilizer requirements and characteristics of crop types.

The fertilizer and water are mixed together to supply water and fertilizer by pipeline system. After the water and fertilizer are melted, irrigation is formed through pipes and spray guns or sprinklers to supply water and nutrients to crops regularly, quantitatively and evenly.

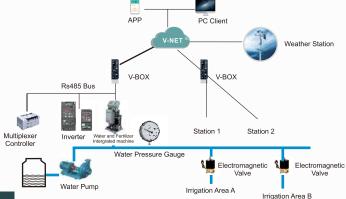
#### **Pain Points**

- Unbalanced soil moisture and fertilizer, numerous of fertilization ratio data and tedious manual operation.
- Traditional fertilization is labor-intensive, time-consuming, and not in real time
- It is not convenient for management with wide area of crop cultivation and large numbers of crops.

#### Solution

Water and Fertilizer Intergrated devices aims to realize automatic irrigation and fertilization. Through the smart detection platform for biogas slurry and fertilizer configured by V-NET and Cloud SCADA, soil temperature and humidity data are uploaded in real time.

Users can remotely view and monitor the Water and Fertilizer Intergrated devices by mobile phones or computers to make irrigation and fertilization more reasonable, so as to improve working efficiency.



#### Advantages

#### **Unattended Operation**

Real-time upload of temperature, humidity, water and fertilizer data through V-BOX or ig HMI, and visual management of the data in the form of graphs and curves.

#### Data Display

Real-time data monitoring of soil and crops, the remote opening of valves and the start and stop of timing rotation could be realized on V-NET, it can realize unattended irrigation, independent control, etc. It could prevent incorrect operation.

#### Alarm System

Real-time data monitoring of water pump current and voltage detection, outlet pressure, flow, etc., it could discover in time whether the irrigation system has unreasonable conditions such as water leakage, low pressure and broken pipes, also could send alarm messages in time to remind operator to carry out the maintenance so as to ensure the efficient operation of the irrigation system.

## **IIoT Solutions**

### **Sewage Treatment Industry**

### Background

With the development of the cities, the construction of hotels, residential departments and villas, the increased requirements for high quality life and a liveable environment, the sewage in the living area must be treated discharge. It requires a remote operation management platform to realize monitoring and automatic operation for domestic sewage treatment and realize unmanned management of equipment, to achieve the effect of centralized management of sewage purification, environment beautification, water and energy saving.

#### **Pain Points**

- It is difficult to centralize design and management with widely distributed sewage water treatment in villages and towns.
- Engineers need to deal with it on site for devices unexpected failure, which time-consuming and labor-intensive.
- It is not easy to detect the device pressure value, flow value and other data, and the device is often overloaded and stop working.

#### Solution

Through V-NET and Cloud Scada platform, Wecon IIoT gateway V-BOX could monitor and upload of devices data in real time, centralized monitoring and processing sensor data, remote download PLC program, and notify alarm messages in time. The start and stop of valves are remotely controlled by mobile phones and computers to realize remote control and centralized management of water treatment stations.

#### Advantages

#### **Unattended Operation**

Real-time data monitoring of water volume and water quality of water pumps.

Off-line transmission ensures that the data of the monitoring is always online and works stably in an unattended state.

#### Multi-Users Management

The supervisor account can authorize and manage accounts at different levels to protect data, management system and correct operation, ensuring the safe and orderly operation of the system.

#### Alarm System

Alarm information can be pushed to V-BOX APP, email, SMS, Line, Telegram etc.It

could improve the efficiency of fault handling and maintenan ce management.

#### Map Monitoring

Map can display devices position in V-NET for one-stop monitoring.

#### Remote Operation

Centralized monitoring, remote commissioning, upgrade and maintain of water treatment devices without engineers on site. It would definitely reduce maintenance cost and improve management efficient.

### Application

Domestic water supply, Industrial water treatment, Sewage treatment







