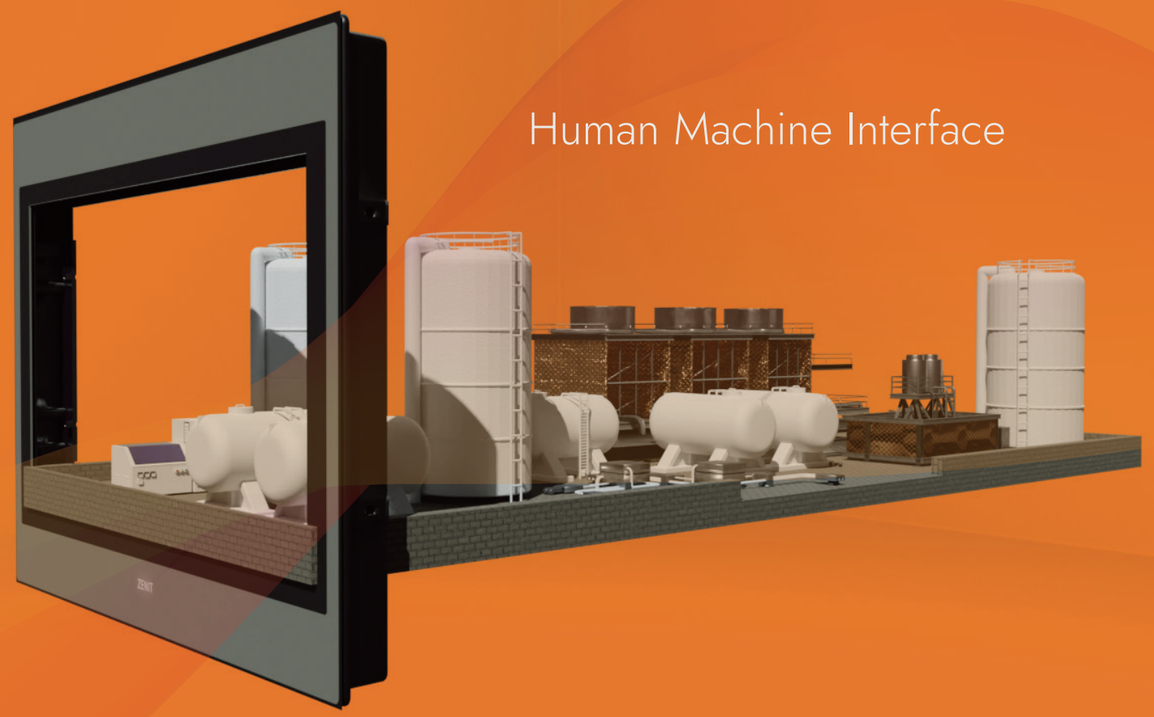
ZENIT

Drive your imagination

P5 SERIES 2025 MODEL

Human Machine Interface



ZENIT

CV1-07-2025

Specifications are subject to change without notice in the interest of product improvement

NEXT Level *SOLUTION*

Comprehensive PLC driver

SIEMENS · MITSUBISHI ELECTRIC · Allen-Bradley · Schneider Electric · BECKHOFF · OMRON · YASKAWA

FATEK · Panasonic · DELTA · LS · INOVANCE · KEYENCE

Support for Major PLC Driver Brands

MySQL · MariaDB

Supports SQL Database Connectivity

VNC FTP NAS

Supports VNC Remote, FTP, and NAS Services

OPC UA · MQTT · BACnet · Modbus

Supporting open communication protocols such as OPC UA, MQTT, BACnet, and Modbus

Powered by premium materials from the world's top suppliers

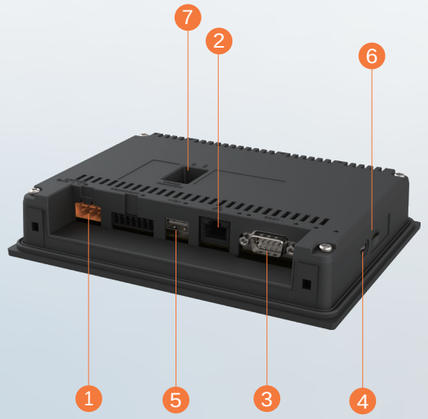
Engineered for unmatched product reliability

RENESAS · Texas Instruments · NXP · ANALOG DEVICES · Micron

Infineon · MICROCHIP · MICREL · NIPPON CHEMI-CON · ShinDengen

New power. Your power.

Built-in Comprehensive Ports



1. 14~32VDC
   Wide Voltage Range
2. Dual Ethernet Port
   10M / 100M + 10M / 100M/1000M
3. RS-232/422/485
4. USB Type C
5. USB Type A
6. Micro SD
7. HMI Extension Port

Upgrade without stopping

93% Up

Boot Speed

Lightning Startup,
Tired of Waiting No More

79% Up

Operational Performance

Smooth Control, Faster Switching
Command Execution

CPU	Flash	RAM
Powerful Core 1Ghz NEW GEN,	4GB,Massive Storage 16X Enhancement	512MB,Efficient Processing 2X Enhancement

Integrate Peripheral PLC and Systems

Passthrough

Without the need for additional wiring, a personal computer can connect to the PLC through the HMI for program modification or parameter settings.

Tag Integration

Supports the import of TAG labels from multiple brands of PLCs
Allows for the rapid establishment of communication links, saving engineering time.

IoT Solutions

Seamlessly integrates with mainstream cloud platforms such as Google and Amazon Cloud, enabling remote monitoring, maintenance, and other intelligent applications through the ZENIT IoT Solution. This comprehensively enhances production management efficiency and operational transparency.

Online Monitoring of PLC Programs

Real-time monitoring and management of PLC system operation status, remote access and data retrieval, alarm notification and recording for analysis, providing convenience for users to monitor and grasp system operation conditions, and improving fault handling efficiency.

USB Peripheral Devices

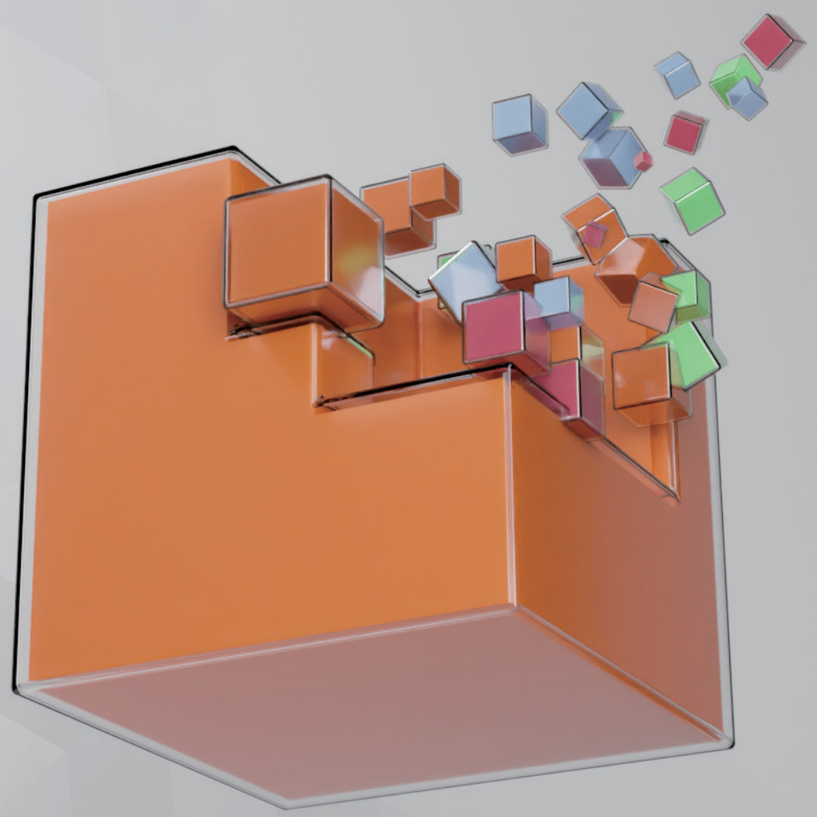
4G/Wifi Connectivity Modules
USB Flash Drives
Keyboards, Mice, RFID, BARCODE,
Printers, USB Camera Extensions

USB Flash Drive Project Maintenance

Ensuring efficient system management and reliable operation through the use of flash drives for program backups, upgrades, and troubleshooting.

HMI PLC

Simple Planning
Abundant Resources



With a wealth of support resources, users can customize content and apply it to various project applications.

Image Library: Offers thousands of industrial images

Sound Library: Allows for the configuration of sound files for alarms or button presses

Font Library: Minimizes font file sizes, reducing the storage space occupied on the HMI

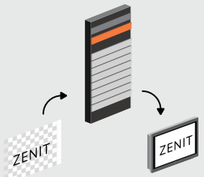
Text Library: Supports multiple languages, meeting localization needs

Label Library: Makes abstract location text easier to understand, facilitating system planning

Pipe Chart

pipe chart consists of several L-shaped, T-shaped, and cross-shaped connectors and pipes. Users can easily and quickly establish the desired pipelines. During operation, users can dynamically control the color, blinking, and flow effects of the pipelines.

Abundant Objects



User Toolbox

Multi-function Buttons

Resource Usage Status

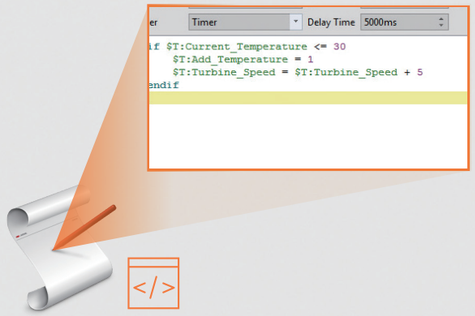
Multi-language

QR Code

Comprehensive and Powerful Features

Script

- Users can flexibly utilize the scripting functionality to complete complex tasks that cannot be handled by regular objects.
- Scripting provides functions such as logical judgments, numerical calculations, loop execution, string operations, and data transmission between devices.
- Supports user-defined functions and also provides the ability to export and import scripts for use in subsequent projects.
- This saves time during the design phase and increases flexibility in usage.
- Real-time compilation results are displayed, allowing users to immediately correct content based on compilation errors.
- Password functionality is provided to protect the script content designed by engineers.



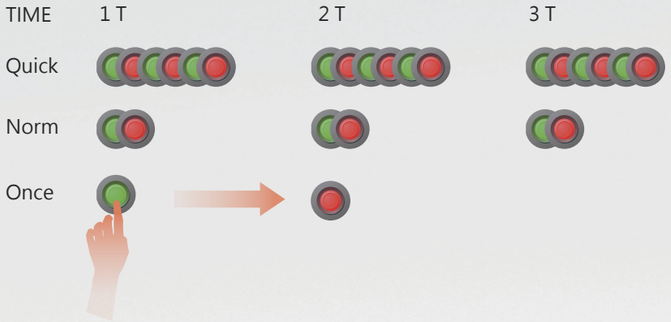
Recipes

- The recipe function allows for the storage of multiple sets of verified data in the HMI, which can be transferred to the PLC when necessary.
- Recipe data can be sourced from CSV files, eliminating the need for operators to manually enter all recipe parameters.
- A built-in recipe editor enables users to conveniently edit recipe content.
- Practical recipe-related objects are available for users to select.
- Supports dynamic addition and editing of recipes.

	Milk	Water	Butter
Cake1	50	75	1.3
Cake2	40	100	0.7
Cake3	50	60	0.6

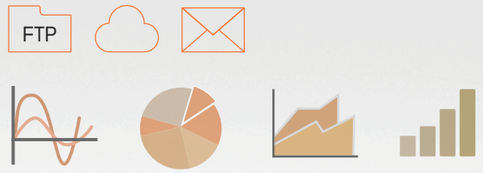
Quick Updates

Users can choose suitable update speeds to obtain the latest data under different scenarios.



Data Collection and ECG Mode

Enables comprehensive data collection and analysis with intuitive data visualization features to assist users in making quick decisions.
Data can be stored on HMI, USB, or SD cards and exported via iAccess, FTP, USB, or email, meeting diverse data management needs.



Screen Capture and Printing

Project screens can be printed using a printer or saved to HMI, SD cards, and USB devices.Supports data report printing, which can be triggered via function keys or scripts, enhancing operational flexibility and efficiency.

Scheduling

Up to 64 schedules can be set, enabling users to trigger events at a specific preset time. Alternatively, the trigger date and time can be dynamically changed at any time. The subsequent actions after triggering an event can include setting, clearing bits, writing values to registers, or executing scripts.

Data Exchange

Multiple Connections

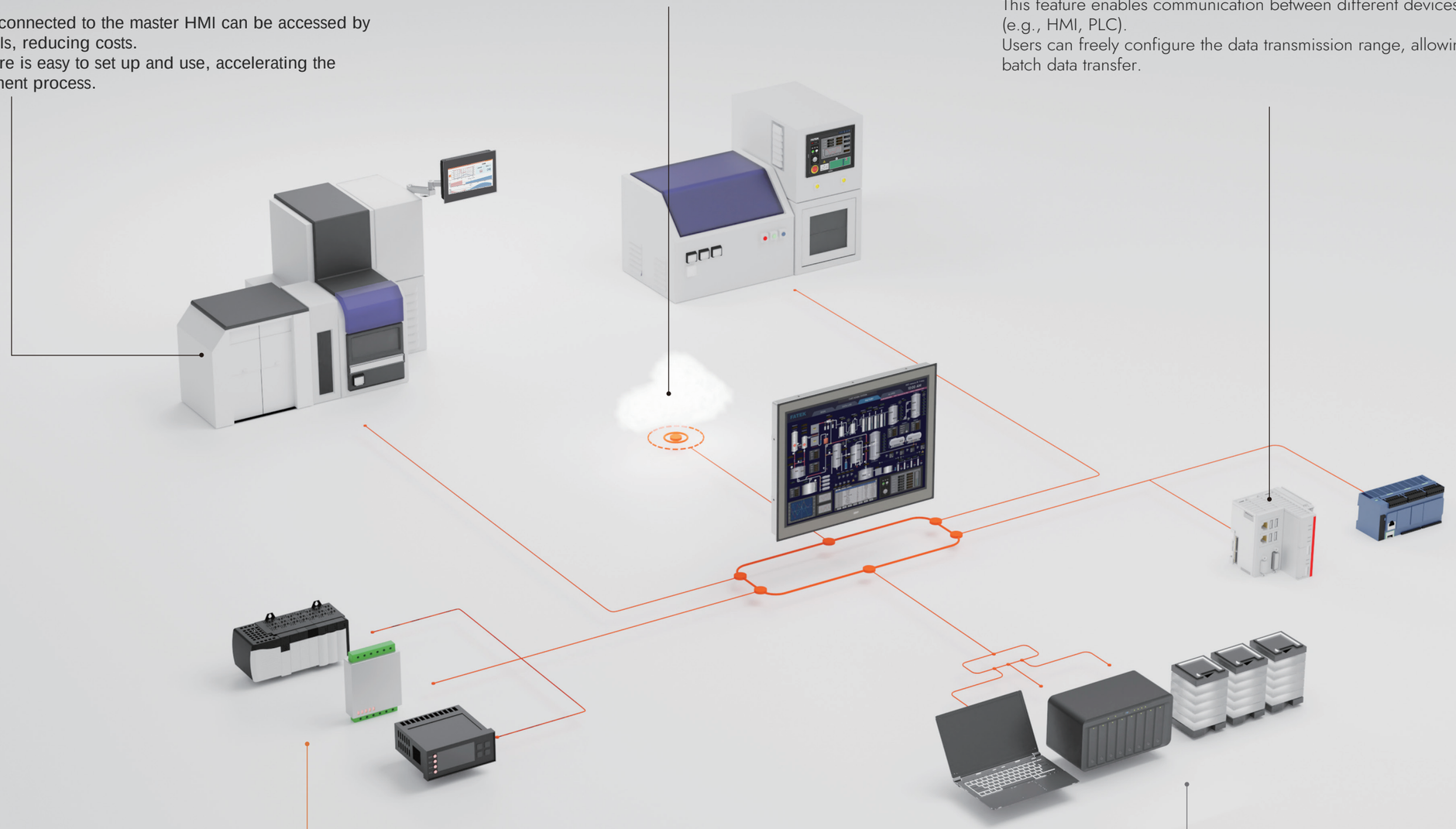
The PLC connected to the master HMI can be accessed by slave HMIs, reducing costs.
The feature is easy to set up and use, accelerating the development process.

IoT

- Supports IoT solutions, enabling remote program maintenance, data monitoring, and screen monitoring.
- Also allows remote data transmission via MQTT (Publisher/Subscriber/Broker).

Data Transmission

This feature enables communication between different devices (e.g., HMI, PLC).
Users can freely configure the data transmission range, allowing for batch data transfer.



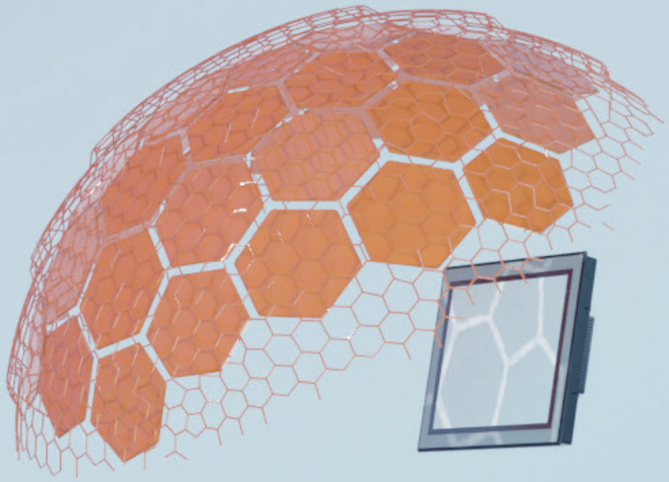
Custom Communication Protocol

- As a master station, you can easily access device data by simply configuring and customizing the transmission or return data instruction format for third-party communication.
- As a slave station, you can customize the behavior after receiving communication commands from third-party devices, facilitating seamless control integration with any peripheral devices.
- Automatic input of various communication checksums is provided for convenience and efficiency.
- This functionality is also supported by scripting, providing greater flexibility in system planning.

Gateway - Supports Modbus, OPC UA, and Drivers for PLC

- Users can easily leverage SCADA, HMI, or other Modbus devices for remote monitoring and data collection.
- Supports both Ethernet (Modbus TCP) and serial transmission (Modbus RTU/Modbus ASCII).
- Supports data exchange between the Modbus protocol and other communication protocols (various PLCs, servos, temperature controllers, frequency converters, etc.).
  Customizable Modbus address mapping tables are available.
- Supports data exchange with databases (MySQL/Microsoft SQL/Maria DB).
- Supports FTP/VNC/OPC UA.

Reliable Security Protection

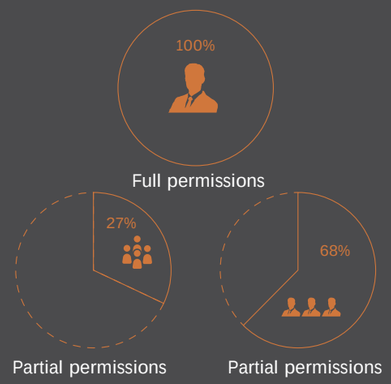


Intellectual Property Protection

Projects can be password-protected for added security. Password protection can also be set for uploading and downloading to further safeguard intellectual property.

Security Levels

support both level-based and account-based allocation methods. Each usage level and user account can have unique password settings, with import and export capabilities to enhance flexibility and convenience.
To strengthen security control, nearly all elements, such as buttons, input components, and trend charts, are assigned independent security levels. Furthermore, objects can be restricted from view if the operator lacks the necessary permissions.

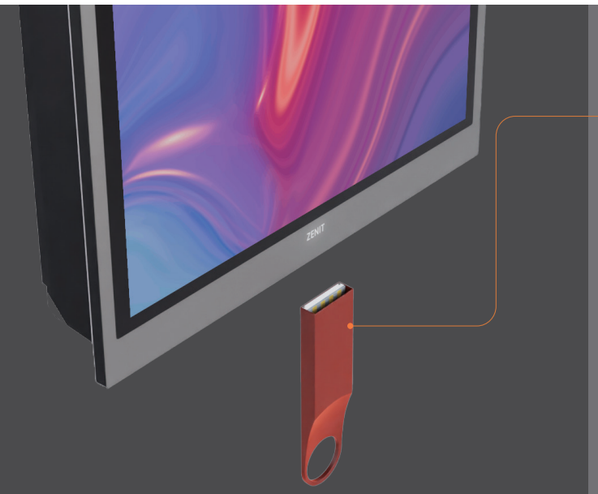


Updating User Accounts/Passwords via External Storage

Altering permissions and passwords on the production line can often be a significant headache for production supervisors. With this feature, the HMI can directly make changes using an external USB flash drive.

Installment Payments

The HMI can be locked on a scheduled basis, facilitating subsequent project delivery.
Supports both static and dynamic modes;
Static Mode: Requires pre-setting an expiration date for each period.
Dynamic Mode: Does not require pre-setting expiration dates. Instead, a key and dynamic password tool are used to decrypt and simultaneously generate a password containing the next expiration date, offering flexibility to meet various needs.



USB Key

USB Key utilizes different permission levels to provide administrators and users with the ability to access and protect data at different levels.

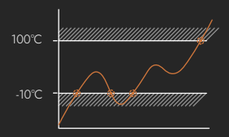
Maintain Management Operation

Alarm Notifications, Debugging, and Analysis

Step1

Custom Alarm Conditions

Alarm trigger conditions can be customized according to specific needs.



Step2

Alarm Triggering

Alarm triggering activates a scrolling marquee light and displays relevant data to notify personnel of the issue.

Step3

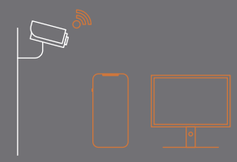
Alarm Notifications

Notifications can be sent via APP, SMS, and Email. Additionally, captured footage from on-site cameras and HMI screens can be sent via Email at the time of the alarm occurrence.

Step4

Alarm Resolution

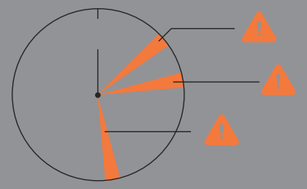
Monitor the on-site situation through cameras and remotely troubleshoot issues in real-time using remotedevices for prompt alarm resolution.



Step5

Error Analysis

Through data collection, trend charts, and operation records, the system records parameters and scenarios during abnormalities, assisting in troubleshooting and problem resolution.



Support for Dynamic Graphics and PDF Viewer

- The dynamic graphics feature allows for real-time display of on-site production status, aiding personnel in quickly identifying the source of errors during alarm occurrences.
- Additionally, the HMI can directly display PDF files of maintenance manuals, eliminating the need to carry bulky manuals or use a separate PC to access electronic files for troubleshooting.

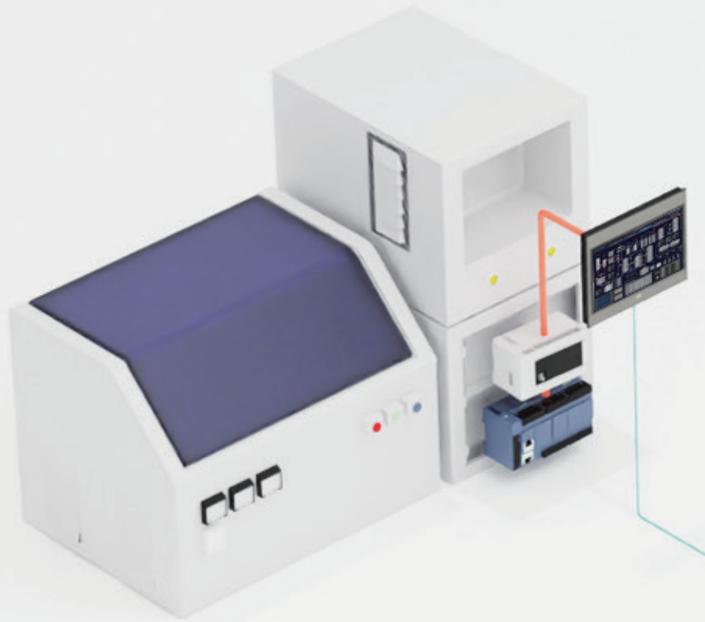
Remote Device Alarm Notifications and Monitoring

- Even when located remotely, you can view the status of your equipment in real-time. Support is provided for access via multiple devices, including browsers, Android, and iOS
- In the event of equipment abnormalities, notifications can be sent via E-mail, SMS, and other methods to ensure timely awareness.

Remote Devices and Servers

Passthrough

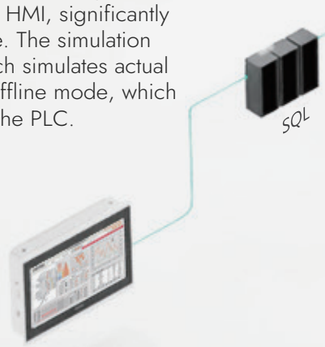
Without the need for additional wiring, a personal computer can connect to the PLC through the HMI for program modification and parameter settings.



PLC

Simulation - Online and Offline Modes

Users can simulate their projects on a computer before downloading them to the HMI, significantly reducing on-site debugging time. The simulation includes both online mode, which simulates actual connections with the PLC, and offline mode, which simulates without connecting to the PLC.

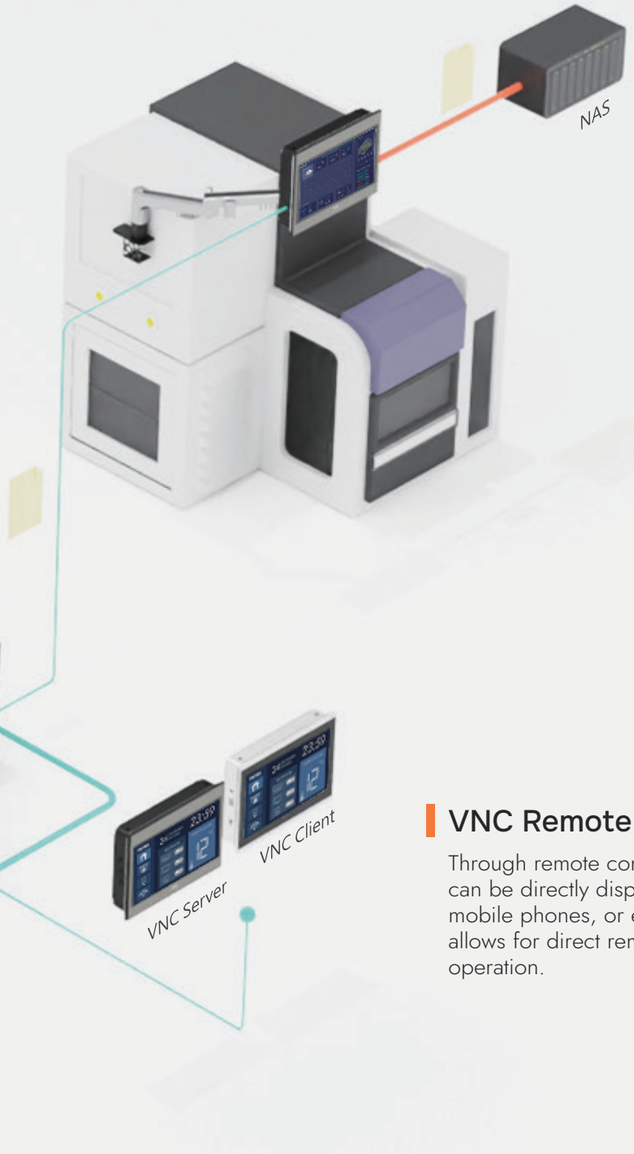


IoT and Database Integration

Data can be stored from the HMI to the IoT cloud, and SQL databases can also be utilized for data backup and transmission.

FTP Server

By enabling the FTP server, users can easily access and modify the data files on the HMI without having to physically visit the equipment site. All they need is a personal computer connected via Ethernet to read or write to the HMI's data files.



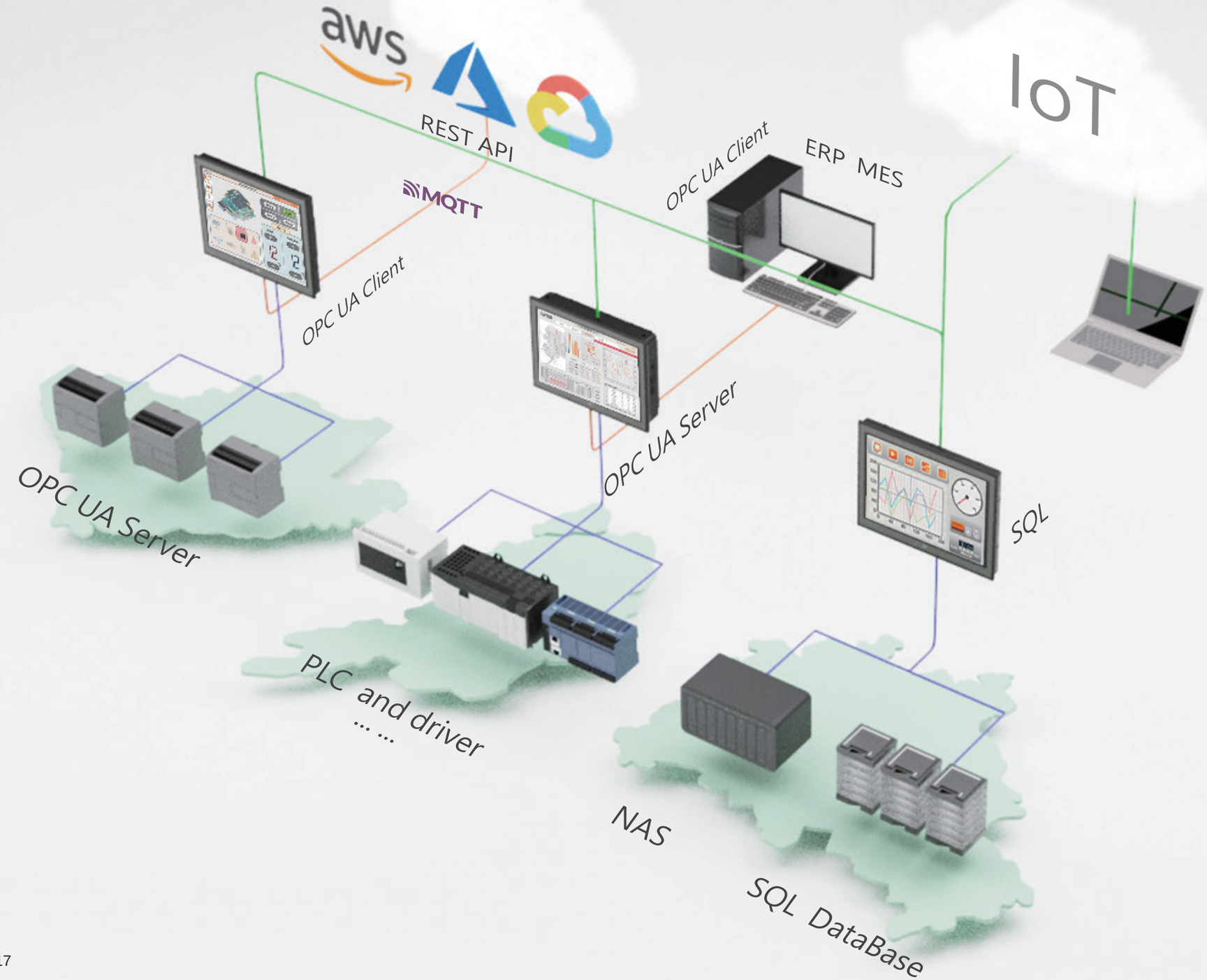
VNC Remote Control

Through remote connection, the HMI's screen can be directly displayed on tablets, PCs, mobile phones, or even other HMIs. This allows for direct remote monitoring and operation.

Remote System Configuration

With the remote system configuration function, employees can easily modify the system settings of the on-site HMI directly from their office.

IoT, Database, and OPC UA Solutions



Multiple Communication Standards

Supports various common communication standards, including REST API, MQTT, OPC, and OPC UA, ensuring seamless connectivity and interoperability between the system and diverse devices and platforms.

SQL Database

Supports MySQL and Microsoft SQL Server databases, enabling data interaction and preventing data loss by storing collected data, alarm records, recipe parameters, and other information in the database.

IoT

Data can be stored in the cloud for remote monitoring, supporting browser/Android/iOS access. This includes convenient features such as data monitoring, alarm notifications, remote maintenance, and more.

Specification

Spec. \ Model		P5043SB	P5043NB	P5070SB	P5070NB	P5070ZB
Display	Panel Type	TFT LCD, 16.7M Colors		TFT LCD, 16.7M Colors		
	Panel Size	4.3" (16:9)		7.0" (16:9)		
	Resolution	480 X 272		800 X 480		
	Contrast Ratio	500		500		
	Backlight	LED, 500 nits		LED, 400 nits		
	Backlight Life Time	30,000 Hrs.		30,000 Hrs.		
	LCD Viewing Angle (T/B/L/R)	50/70/70/70		70/50/70/70		
Touch	Type	4-wire Resistive Film				
	Accuracy	X axis+/-2%; Y axis +/-2%				
System	CPU	32 bit RISC Cortex 600MHz		64 bit RISC Cortex 1GHz (Renesas) G03P Version		
	Flash	256MB		4GB G03P Version		
	RAM	128MB		512MB G03P Version		
	RTC	Built-in				
I/O Port	Serial 1	Connector: D-Sub 9-Pin COM1: RS-232 COM2: RS-422/485 COM3: RS-485		Connector: D-Sub 9-Pin COM1: RS-232		
	Serial 2	---		Connector: Pluggable Terminal Block COM3:RS-422/485 COM4:RS-485		
	Ethernet	---	10M/100M	---	10M/100M	10M/100M
	USB	USB2.0 Type-A (Host)x1 USB2.0 Type mini-B (Device)x1		USB2.0 Type-A (Host)x1 USB2.0 Type C (Device)x1		
	Micro-SD Slot	---	---	---	---	Yes
	Termination Switch	Yes (RS-422/485)				
Module Expansion	PLC Extension	HB1 main units (10/14MB Series)		HB1 main units + B1 extension modules		
	4G Extension	Yes				
	WIFI Extension	Yes				
	RFID Extension	Yes				
Power	Power Input	14VDC-32VDC (Isolated Power)				
	Isolation Resistance	50MΩ at 500VDC				
	Power Consumption	9.58W	10.08W	11.5W	12W	12.5W
Environment	Protection Structure	Front Panel: IP65				
	PCB Coating	Yes				
	Operating Temp.	0 ~ 50°C				
	Storage Temp.	-20 ~ 60°C				
	Relative Humidity	10% ~ 90%@40°C (non-condensing)				
	Withstand Voltage	AC500V/ 20mA/ 1Min. (between charger & FG terminals)				
	Vibration Endurance	5 to 9Hz Half-amplitude: 3.5mm 9 to 150 Hz Constant Acceleration: 19.6m/s2 (2G) 3 directions of X, Y, Z: 10times (IEC61131-2 compliant)				
Enclosure		Plastic				
Dimension/ Weight	Cut-out	118.5 x 92.5 (mm)		175.0 x 130.0 (mm)		
	W x H x D	128.0 x 102.0 x 36.4 (mm)		184.0x 139.0 x 35.0 (mm)		
	Weight	215 (g)	235 (g)	465 (g)	485 (g)	505 (g)
Certification		CE, UL*				

* Please inform when ordering

Spec. \ Model		P5101SB	P5101NB	P5101ZB	P5120ZB	P5150ZB
Display	Panel Type	TFT LCD, 16.7M Colors			TFT LCD, 16.2M Colors	TFT LCD, 16.2M Colors
	Panel Size	10.1" (16:9)			12.0"(4:3)	15.0"(4:3)
	Resolution	1024 X 600			1024 X 768	1024 X 768
	Contrast Ratio	450			900	700
	Backlight	LED, 300 nits			LED, 500 nits	LED, 300 nits
	Backlight Life Time	30,000 Hrs.			30,000 Hrs.	50,000 Hrs.
	LCD Viewing Angle (T/B/L/R)	50/20/55/55			70/70/80/80	70/70/80/80
Touch	Type	4-wire Resistive Film				
	Accuracy	X axis+/-2%; Y axis +/-2%				
System	CPU	64 bit RISC Cortex 1GHz (Renesas) G03P Version			32 bit RISC Cortex 1GHz	
	Flash	4GB G03P Version			256MB	
	RAM	512MB G03P Version			256MB	
	RTC	Built-in				
I/O Port	Serial 1	Connector: D-Sub 9-Pin COM1: RS-232				
	Serial 2	Connector: Pluggable Terminal Block COM3: RS-422/485 COM4: RS-485				
	Ethernet	---	10M/100M	10M/100M	10M/100M	10M/100M
	USB	USB2.0 Type-A (Host)x1 USB2.0 Type C (Device)x1				
	Micro-SD Slot	---	---	Yes	Yes	Yes
	Termination Switch	Yes (RS-422/485)				
Module Expansion	PLC Extension	HB1 main units + B1 extension modules				
	4G Extension	Yes				
	WIFI Extension	Yes				
	RFID Extension	Yes				
Power	Power Input	14VDC-32VDC (Isolated Power)				
	Isolation Resistance	50MΩ at 500VDC				
	Power Consumption	11.02W	11.52W	12.02W	15W	20W
Environment	Protection Structure	Front Panel: IP65				
	PCB Coating	Yes				
	Operating Temp.	0 ~ 50°C				
	Storage Temp.	-20 ~ 60°C				
	Relative Humidity	10% ~ 90%@40°C (non-condensing)				
	Withstand Voltage	AC500V/ 20mA/ 1Min. (between charger & FG terminals)				
	Vibration Endurance	5 to 9Hz Half-amplitude: 3.5mm 9 to 150 Hz Constant Acceleration: 19.6m/s2 (2G) 3 directions of X, Y, Z: 10times (IEC61131-2 compliant)				
Enclosure		Plastic				Aluminum
Dimension/ Weight	Cut-out	257.0 x 171.0 (mm)			282.0 x 230.0 (mm)	348.0 x 274.0 (mm)
	W x H x D	266.0x 180.0 x 38.0 (mm)			291.0x 239.0 x 40.9(mm)	357.0x283.0x52.5 (mm)
	Weight	860(g)	880 (g)	900 (g)	1450 (g)	3165 (g)
Certification		CE, UL*				

* Please inform when ordering

Specification



Spec. \ Model		P5043SA	P5043NA	P5070SA	P5070NA	P5070ZA	P5101SA	P5101NA	P5101ZA
Display	Panel Type	TFT LCD, 16.7M Colors		TFT LCD, 16.7M Colors			TFT LCD, 16.7M Colors		
	Panel Size	4.3" (16:9)		7.0" (16:9)			10.1" (16:9)		
	Resolution	480 X 272		800 X 480			1024x600		
	Contrast Ratio	500		500			450		
	Backlight	LED, 500nits		LED, 400nits			LED, 300 nits		
	Backlight Life Time	30,000 Hrs.		30,000 Hrs.			30,000 Hrs.		
	LCD Viewing Angle (T/B/L/R)	50/70/70/70		70/50/70/70			50/20/55/55		
Touch	Type	4-wire Resistive Film		4-wire Resistive Film					
	Accuracy	X axis+/-2%; Y axis +/-2%		X axis+/-2%; Y axis +/-2%					
System	CPU	32 bit RISC Cortex 600MHz		64 bit RISC Cortex 1GHz (Renesas)					
	Flash	256MB		4GB G03P Version					
	RAM	128MB		512MB G03P Version					
	RTC	Built-in		Built-in G03P Version					
I/O Port	Serial 1	Connector: D-Sub 9-Pin COM1: RS-232 COM2: RS-422/485 COM3: RS-485		Connector: D-Sub 9-Pin COM1: RS-232			Connector: D-Sub 9-Pin COM1: RS-232		
	Serial 2	---		Connector: Pluggable Terminal Block COM3:RS-422/485 COM4:RS-485			Connector: Pluggable Terminal Block COM3:RS-422/485 COM4:RS-485		
	Ethernet	---	10M/100M	---	10M/100M	10M/100M	---	10M/100M	10M/100M
	USB	USB2.0 Type-A (Host)x1 USB2.0 Type mini-B (Device)x1							
	Micro-SD Slot	---	---	---	---	Yes	---	---	Yes
	Audio	---	---	---	---	Yes	---	---	Yes
	Termination Switch	Yes(RS-422/485)							
I/O Extension	PLC Extension	HB1 main units (10/14MB Series)		HB1 main units + B1 extension modules					
	HMI Extension	Yes							
Power	Power Input	14VDC-32VDC (Isolated Power)							
	Isolation Resistance	50MΩ at 500VDC							
	Power Consumption	9.58W	10.08W	11.48W	11.98W	12.48W	11.02W	11.52W	12.02W
Environment	Protection Structure	Front Panel: IP65							
	PCB Coating	Yes							
	Operating Temp.	0 ~ 50°C							
	Storage Temp.	-20 ~ 60°C							
	Relative Humidity	10% ~ 90%@40°C (non-condensing)							
	Withstand Voltage	AC500V/ 20mA/ 1Min. (between charger & FG terminals)							
	Vibration Endurance	5 to 9Hz Half-amplitude: 3.5mm 9 to 150 Hz Constant Acceleration: 19.6m/s2 (2G) 3 directions of X, Y, Z: 10times (IEC61131-2 compliant)							
Enclosure		Plastic							
Dimension/ Weight	Cut-out	118.5 x 92.5 (mm)		191.5 x 137.5 (mm)			259.5 x 201.5 (mm)		
	W x H x D	128.0 x 102.0 x 36.4 (mm)		201.0 x 147.0 x 38.3 (mm)			271.5 x 213.5 x 44.9 (mm)		
	Weight	215 (g)	235 (g)	610 (g)	630 (g)	650 (g)	1340 (g)	1360 (g)	1380 (g)
Certification		CE, UL*							

* Please inform when ordering


Spec. \ Model		P5070SB(R)	P5070NB(R)	U7070NA
Display	Panel Type	TFT LCD, 16.7M Colors		TFT LCD, 16.7M Colors
	Panel Size	7.0" (16:9)		7.0" (16:9)
	Resolution	800 X 480		1024 X 600
	Contrast Ratio	500		700
	Backlight	LED, 400 nits		LED, 500 nits
	Backlight Life Time	30,000 Hrs.		30,000 Hrs.
	LCD Viewing Angle (T/B/L/R)	70/50/70/70		70/50/70/70
Touch	Type	4-wire Resistive Film		
	Accuracy	X axis+/-2%; Y axis +/-2%		
System	CPU	32 bit RISC Cortex 600MHz		32 bit RISC Cortex-A15 800MHz
	Flash	256MB		4GB
	RAM	128MB		1GB
	RTC	Built-in		
I/O Port	Serial 1	Connector: D-Sub 9-Pin COM1: RS-232		Connector: D-Sub 9-Pin COM1: RS-232 COM2: RS-422/485 COM3: RS-485
	Serial 2	Connector: Pluggable Terminal Block COM3:RS-422/485 COM4:RS-485		---
	Ethernet	---	10M/100M	1ch 10M/100M 1ch 10M/100M/1000M
	USB	USB2.0 Type-A (Host)x1 USB2.0 Type C (Device)x1		USB2.0 Type-A (Host)x1 USB2.0 Type C (Device)x1
	Micro-SD Slot	---	---	---
	Termination Switch	Yes (RS-422/485)		---
I/O Extension	PLC Extension	HB1 main units + B1 extension modules		HB1 main units + B1 extension modules
	HMI Extension	Yes		
Power	Power Input	14VDC-32VDC (Isolated Power)		
	Isolation Resistance	50MΩ at 500VDC		
	Power Consumption	12.5W		21.0W
Environment	Protection Structure	Front Panel: IP65		
	PCB Coating	Yes		
	Operating Temp.	0 ~ 50°C		-20 ~ 60°C
	Storage Temp.	-20 ~ 60°C		
	Relative Humidity	10% ~ 90%@40°C (non-condensing)		
	Withstand Voltage	AC500V/ 20mA/ 1Min. (between charger & FG terminals)		
	Vibration Endurance	5 to 9Hz Half-amplitude: 3.5mm 9 to 150 Hz Constant Acceleration: 19.6m/s2 (2G) 3 directions of X, Y, Z: 10times (IEC61131-2 compliant)		
Enclosure		Plastic		Aluminum
Dimension/ Weight	Cut-out	174.5 x 109.2 (mm)		174.5 x 130.0 (mm)
	W x H x D	174.0 x 129.0 x 34.5 (mm)		184.0x 139.0 x 34.0 (mm)
	Weight	480 (g)		850 (g)
Certification		CE, UL*		CE

* Please inform when ordering

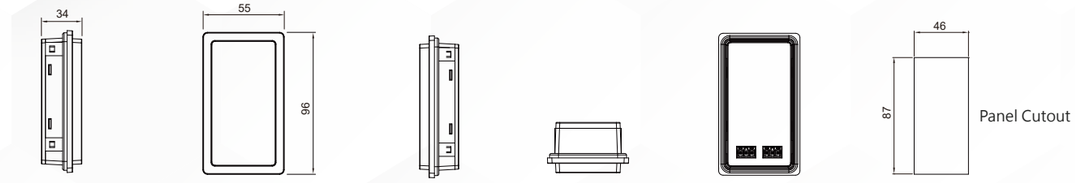
Specification



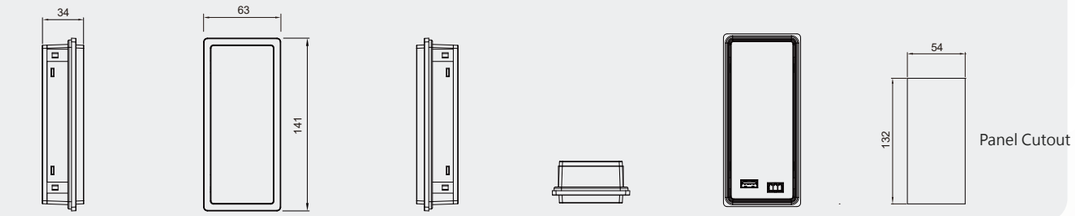
Spec. / Model		HEM-WLC-4G	HEM-WLC-WIFI	HEM-WLC-RFID
Specification	Network Frequency Band	(3G):2100MHz (4G):700/900/1800MHz (Band 28/8/3)	2.4GHz & 5GHz	13.56MHz
	Supported Protocols	GSM/GPRS/EDGE/UMTS/HSDPA/HSUPA (3G) LTE (4G)	IEEE 802.11 a/b/g/n IEEE 802.11 ac MU MIMO	ISO 15693 ISO 18092 ISO 14443A/B
Communication Interface		USB 2.0 Type A (F) Requires the use of a USB 2.0 Cable Type A Male to Type A Male to connect with the HMI.		RS - 485
Power	Power Input	Powered via USB, no additional power supply required		+24VDC
	Power Consumption	2.2W (5V, 440mA)	2.25W (5V, 450mA)	0.72W (24V, 30mA)
Environment	Protection Structure	Front: IP66, Rear: IP20		
	PCB Coating	Yes		
	Operating Temp.	0 ~ 50°C		
	Storage Temp.	-20 ~ 60°C		
	Relative Humidity	10% ~ 90%@40°C (non-condensing)		
	Withstand Voltage	AC500V/ 20mA/ 1Min		
	Vibration Endurance	5 to 9Hz Half-amplitude: 3.5mm 9 to 150 Hz Constant Acceleration: 19.6m/s2 (2G) 3 directions of X, Y, Z: 10times (IEC61131-2 compliant)		
Dimension/ Weight	Cut-out	132 x 54 (mm)	132 x 54 (mm)	87 x 46 (mm)
	W x H x D	141 x 63 x 34 (mm)	141 x 63 x 34 (mm)	96 x 55 x 34 (mm)
	Weight	95 (g)	110 (g)	65 (g)
Certification		CE	CE	-

Dimensions

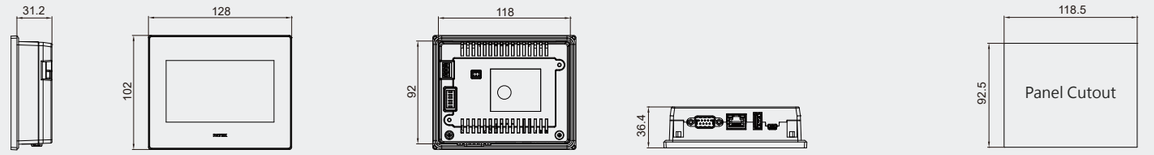
HEM-WLC-RFID



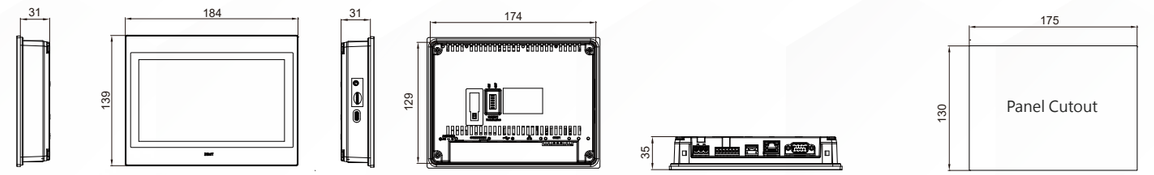
HEM-WLC-4G / WIFI



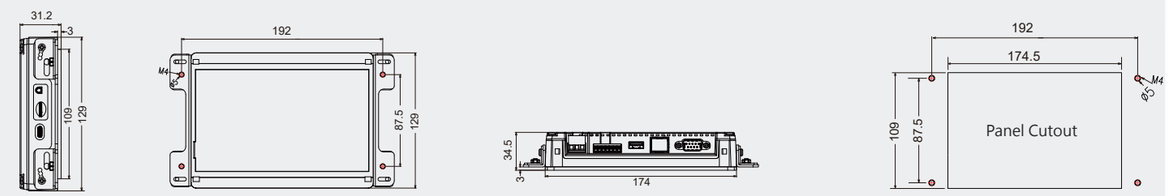
P5043 A/B



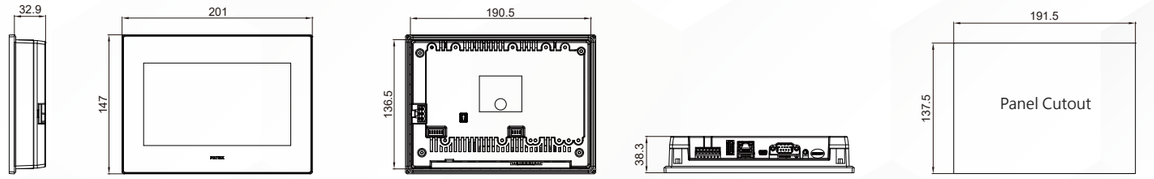
P5070 B / U7070A



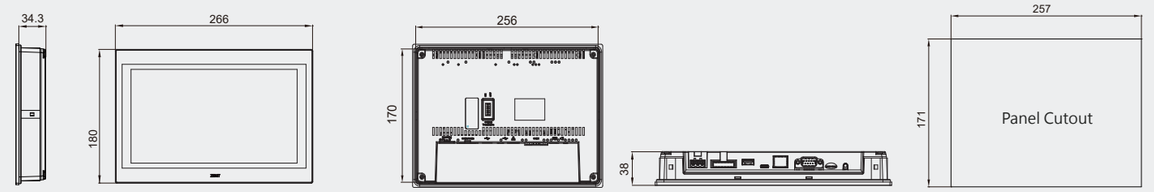
P5070 B(R)



P5070 A

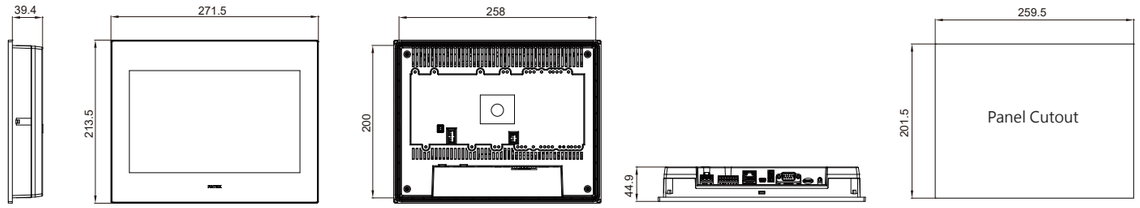


P5101 B

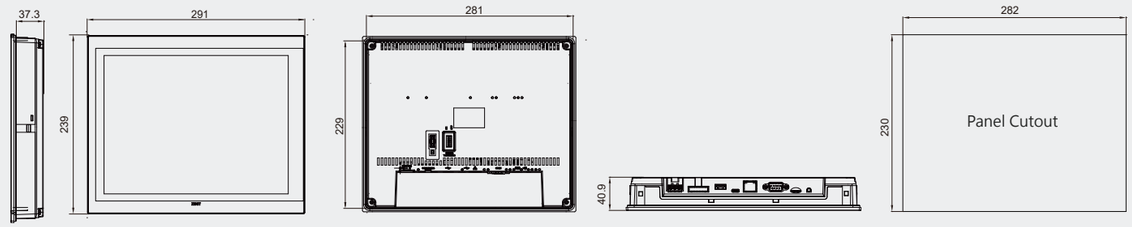


Dimensions

P5101 A



P5120 B



P5150 B

HMI Accessories

Item Name	Model	Description
Nameplate	P5NP043A/B	Nameplate for P5043SA/B,NA/B
	P5NP070A/B	Nameplate for P5070SA/B,NA/B,ZA/B
	P5NP101A	Nameplate for P5101SA/NA/ZA
	P5NP150B	Nameplate for P5150ZB
USB 1.8m download cable	USBA-MINIB-180	1.8m USB mini B type to USB A type download cable
Communication Cable	FBs-232P0-9FR-200	Mini-DIN 4M to DB9F 90°communication cable, (FBs main unit Port 0 RS232 connect to DB9M), Length 200cm
Connector	P5CC070	7-pin screw terminal block
	P5PC070	7-pin spring terminal block
	HMPC043	Power Connector for P5043SA/NA
	HMPC070	Power Connector for P5070SA/B,NA/B,ZA/B, P5101SA/NA/ZA and P5150ZB
	HMPC043H	Power Connector for P5043SA/B,NA/B (horizontal wire entry)
	HMPC070H	Power Connector for P5070SA/B,NA/B,ZA/B, P5101SA/NA/ZA and P5150ZB (horizontal wire entry)
Communication Extension	HEM-WLC-4G	4G wireless communication module, USB interface, no need for additional power configuration
	HEM-WLC-WIFI	WIFI wireless communication module, USB interface, no need for additional power configuration
	HEM-WLC-RFID	RFID wireless communication module, RS485 communication, Requires 24VDC power supply

HB1 & B1 Options

Item Name		Model	Specifications
Main Units	HB1 main units*	HB1-10MB ◇ 25-D24SA	6 point 24VDC digital input(4 points 50KHz, 2 points total 5KHz), 4 point relay output or transistor output(2 points 50KHz), build-in HMI port(back)+RS232+RS485 communication ports, left side is expandable 1-2 modules, right side is expandable up to 128 I/O points, built-in RTC and with detachable terminal block
		HB1-14MB ◇ 25-D24SA	8 point 24VDC digital input(4 points 50KHz, 4 points total 5KHz), 6 point relay output or transistor output(2 points 50KHz), build-in HMI port(back)+RS232+RS485 communication ports, left side is expandable 1-2 modules, right side is expandable up to 128 I/O points, built-in RTC and with detachable terminal block
		HB1-20MB ◇ 25-D24SA	12 point 24VDC digital input(6 points 50KHz, 6 points total 5KHz), 8 point relay output or transistor output(4points 50KHZ), build-in HMI port(back)+RS232+RS485 communication ports, left side is expandable 1-2 modules, right side is expandable up to 128 I/O points, built-in RTC and with detachable terminal block
		HB1-24MB ◇ 25-D24SA	14 point 24VDC digital input(8 points 50KHz, 6 points total 5KHz), 10 point relay output or transistor output(4points 50KHZ), build-in HMI port(back)+RS232+RS485 communication ports, left side is expandable 1-2 modules, right side is expandable up to 128 I/O points, built-in RTC and with detachable terminal block
		HB1-32MB ◇ 25-D24SA	20 point 24VDC digital input(8 points 50KHz, 8 points total 5KHz), 12 point relay output or transistor output(6 points 50KHZ), build-in HMI port(back)+RS232+RS485 communication ports, left side is expandable 1-2 modules, right side is expandable up to 128 I/O points, built-in RTC and with detachable terminal block
		HB1-40MB ◇ 25-D24SA	24 point 24VDC digital input(8 points 50KHz, 8 points total 5KHz), 16 point relay output or transistor output(6 points 50KHZ), build-in HMI port(back)+RS232+RS485 communication ports, left side is expandable 1-2 modules, right side is expandable up to 128 I/O points, built-in RTC and with detachable terminal block
		HB1-60MB ◇ 25-D24SA	36 point 24VDC digital input(8 points 50KHz, 8 points total 5KHz), 24 point relay output or transistor output(8 points 50KHZ), build-in HMI port(back)+RS232+RS485 communication ports, left side is expandable 1-2 modules, right side is expandable up to 128 I/O points, built-in RTC and with detachable terminal block
Right Side Expansion Modules	DIO Expansion Modules	B1-4Y ◇ S	4 points relay or transistor output
		B1-8XS	8 points 24VDC digital input
		B1-8Y ◇ S	8 points relay or transistor output
		B1-8XY ◇ S	4 points 24VDC digital input, 4 points relay or transistor output
		B1-16XS	16 points 24VDC digital input
		B1-16Y ◇ S	16 points relay or transistor output
		B1-16XY ◇ S	8 points 24VDC digital input, 8 points relay or transistor output
		B1-24XY ◇ S	14 points 24VDC digital input, 10 points relay or transistor output
		B1-40XY ◇ S	24 points 24VDC digital input, 16 points relay or transistor output
		B1-60XY ◇ S	36 points 24VDC digital input, 24 points relay or transistor output
	AIO Modules	B1-2DAS	Non-Isolated 2 channels, 12-bit analog output module(-10~10V, 0~10V or -20~20mA, 0~20mA)
		B1-6ADS	Non-Isolated 6 channels, 12-bit analog input module (-10~10V, 0~10V or -20~20mA, 0~20mA)
Left Side Expansion Modules	AIO Modules	B1-L2DAS	2 channels, 12-bit analog output module (0~10V or 0~20mA)
		B1-L4ADS	4 channels, 12-bit analog input module (0~10V or 0~20mA)
		B1-L2A2DS	2 channels, 12-bit analog input + 1 channel, 12-bit analog output combo analog module (0~10V or 0~20mA)
		B1-L4NTCS	4 channels, NTC temperature input module, 12-bit resolution , measuring range 100Ω~100KΩ
	Communication Modules	B1-CM2S	1 port RS232(Port4) communication module
		B1-CM5S	1 port RS485(Port4) communication module
		B1-CM22S	2 ports RS232 communication module
		B1-CM55S	2 ports RS485 communication module
		B1-CM25S	1 port RS232(Port1) + 1 port RS485(Port2) communication module
HB1 & B1 Peripherals	General Purpose Communication Converters	FBs-CM25C	General purpose RS232 to RS485/RS422 communication interface converter with photocouple isolation
		FBs-CM5R	General purpose RS485 repeater with photocouple isolation
		FBs-CM5H	General purpose 4 ports RS485 HUB with photocouple isolation, RS485 can be connected as star connection
	Bluetooth Communication Module	FBs-B2C	Bluetooth Module for PLC Main Unit Port 0
	USB Communication Converter	FBs-U2C-MD-180	Communication converter cable with standard USB AM connector to RS232 Mini-DIN 4M connector (used in standard PC USB to FBs main unit Port0 RS232), length 180cm
	Communication Cable	FBs-232P0-9F-150	Mini-DIN 4M to DB9F communication cable (FBs main unit Port 0 RS232 connect to standard DB9M), length 150cm
		FBs-232P0-9M-400	Mini-DIN 4M to DB9M communication cable (FBs main unit Port 0 RS232 connect to standard DB9F), length 400cm
		FBs-232P0-MD-200	Mini-DIN 4M to Mini-DIN 4M communication cable (FBs main unit Port 0 RS232 connect to FBs-PEP/PEPR), length 200cm
		FBs-232P0-MDR-200	Mini-DIN 4M to 90° Mini-DIN 4MM communication cable(FBs main unit Port0 RS232 connect to FBs-PEP/PEPR), length 200cm

◇ : R - Relay output, T - Transistor Sink(NPN) output, J - Source (PNP) output

*HB1 must back mount on HMI for use