HMI

TS·TG·MTG·CCSG·RT·OP

TS series high performance HMI

Linux system and efficient A7 processor are adopted
Smoother man-machine experience

TS5 series IOT HMI   TS3 series standard HMI

■ High Performance Processor

ARM Cortex-A7 processor is adopted, with main frequency of 1GHz, built-in 128MB memory and expandable flash disk storage.
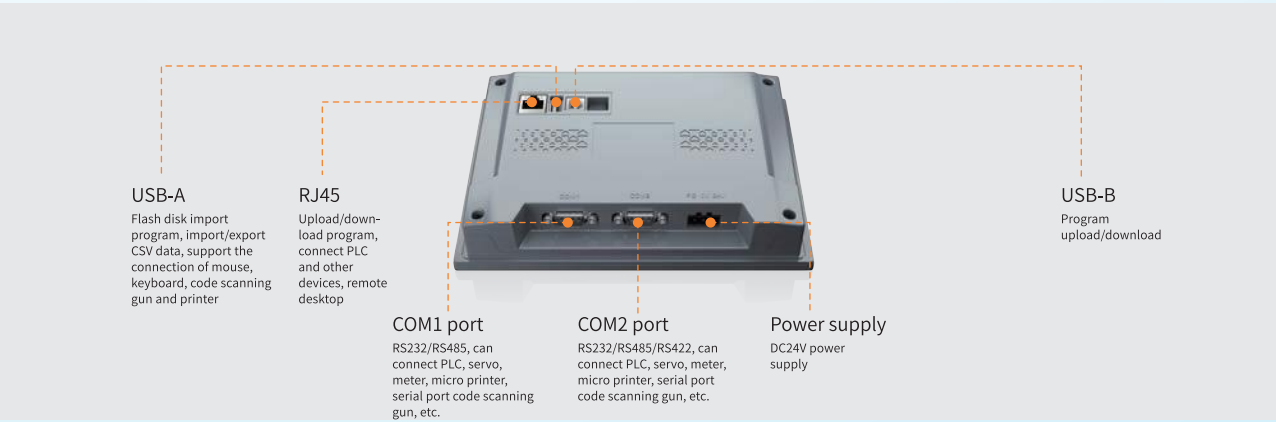
■ High Efficiency System

Based on the Linux system, the multi-task processing mechanism greatly improves the system response speed and makes the operation more efficient and fast.

■ Multidirectional Installation

It supports free installation in four directions, which can meet the needs of different occasions.

Horizontal - normal display   Horizontal - rotate 180 degrees   Vertical - rotate 90 degrees clockwise   Vertical - rotate 90 degrees counterclockwise

■ Rich Device Connectivity

USB-A
Flash disk import program, import/export CSV data, support the connection of mouse, keyboard, code scanning gun and printer

RJ45
Upload/download program, connect PLC and other devices, remote desktop

USB-B
Program upload/download

COM1 port
RS232/RS485, can connect PLC, servo, meter, micro printer, serial port code scanning gun, etc.

COM2 port
RS232/RS485/RS422, can connect PLC, servo, meter, micro printer, serial port code scanning gun, etc.

Power supply
DC24V power supply

Standard HMI
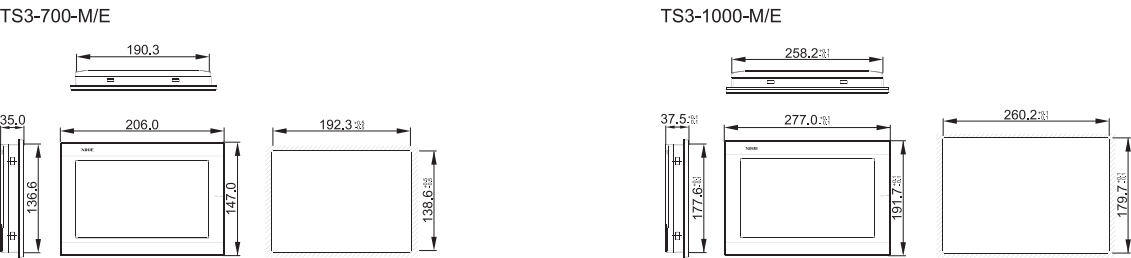
TS3 series   10.1" 7"

- Cortex-A7 processor is adopted, with main frequency of 1GHz and built-in 128MB memory
- Rich functions, suitable for a variety of occasions
- It has stronger tightness and better protection against dust, water vapor and scrap
- The product structure conforms to the lightweight design, which is light and slim
- The new touchWin Pro software is fully upgraded

| Product specification

	Product model	TS3-700-M	TS3-700-E	TS3-1000-M	TS3-1000-E
Product features	Dimension	7"		10.1"	
	Type	16.77 million colors			
	Resolution	800*480		1024*600	
	Brightness	200 cd/m²			
	Touch panel	Four-wire resistive touch panel			
	Service life	Above 50000 hours, ambient temperature 25°C, 24 hours operation			
	Processor	Cortex-A7 1GHz			
	Memory	128MB			
Interface	COM1 port	RS232/RS485			
	COM2 port	RS232/RS485/RS422			
	Ethernet port	/	Standard RJ45	/	Standard RJ45
	USB-A port	Flash disk port, USB2.0 standard			
	USB-B port	USB download port, USB2.0 standard			
Electrical features	Input voltage	DC24V (voltage range: DC22~DC26V)			
	Power	5W		8W	
	Allowable instantaneous power failure	Below 10ms (actual power loss less than 1s)			
	Withstand voltage	AC1000V, 10mA, less than 1 minute (signal and ground)			
	Insulation impedance	Above DC500V, 10MΩ (signal and ground)			
Environment	Operation temperature	0-50°C			
	Storage temperature	-20-60°C			
	Ambient humidity	10%RH~90%RH (no condensation)			
	Vibration resistance	10~25Hz (X, Y, Z direction each 30 minutes 2G)			
	Anti-interference	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute			
	Ambient air	No corrosive gas			
	Protection level	Front panel IP65			
	Cooling method	Natural air cooling			
Structure	External dimension (mm)	206.0*147.0*35.0		277.0*191.7*37.5	
	Opening size (mm)	192.3*138.6(±0.5)		260.2*179.7(±0.5)	

| Appearance dimension drawing (Unit: mm)

TS3-700-M/E

190.3
35.0
206.0
136.6⁺⁰·⁵
147.0
192.3⁺⁰·⁵
138.6⁺⁰·⁵

TS3-1000-M/E

258.2⁺⁰·⁵
37.5⁺⁰·⁵
277.0⁺⁰·⁵
177.6⁺⁰·⁵
191.7⁺⁰·⁵
260.2⁺⁰·⁵
179.7⁺⁰·⁵

IOT HMI

TS5 series   10.1" 7"

- Remote functions: remote desktop (PC remote control HMI real-time screen), remote transparent transmission (remote upload/download PLC program), remote download (updating HMI program)
- It supports audio output and can output various audio through external speakers
- Cover mainstream information interaction protocols and support MQTT/TCP IP
- Standard network port, optional WIFI/4G module, networking through WIFI or 4G
- Edge calculation is conducive to data analysis and statistics

■ Remote Desktop

That is, VNC function, which supports PC or mobile synchronizing the screen and data of the HMI. It can monitor the HMI screen in real time and remotely control the touch screen without arriving at the site.
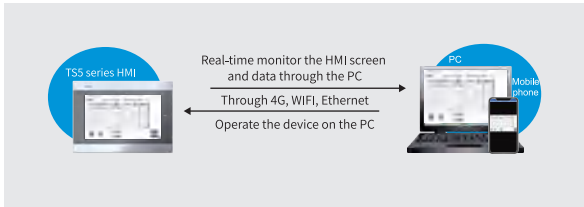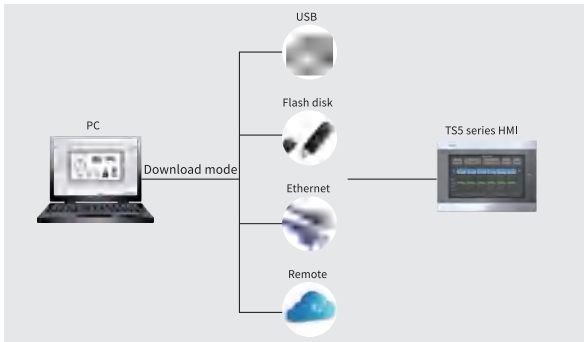

■ Remote Transparent Transmission

It supports remote uploading and downloading PLC program, which solves the trouble of no download cable and insufficient interface. The program can be downloaded to PLC through 4G or WIFI module.
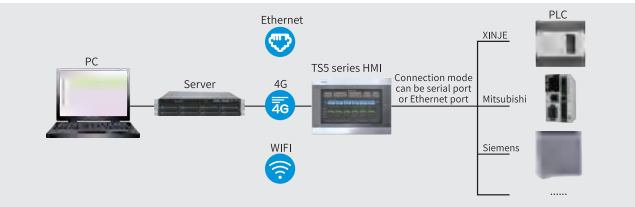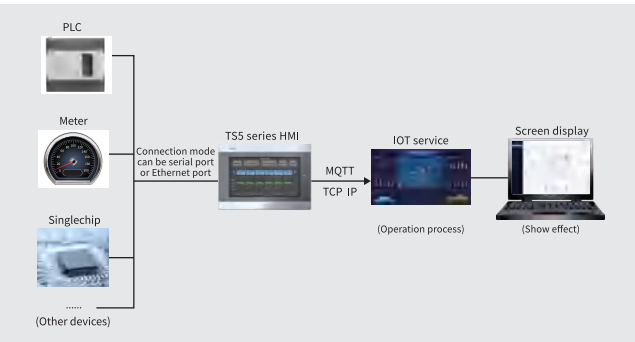

■ Download Programs in Multiple Ways

Support flash disk, LAN or remote upload/download HMI program.

Covering mainstream information exchange protocols, support MQTT/TCP IP.

### ■ Optional WIFI/4G Communication Expansion Board

The HMI is equipped with a standard network port and supports WIFI/4G communication expansion board. It is integrated with TS5L and does not occupy excess space. 4G or WIFI communication expansion board can be switched freely according to the use occasion.

| Product specification

Product model		TS5-700	TS5-1000
Product features	Size	7"	10.1"
	Type	16.77 million colors	
	Resolution	800*480	1024*600
	Brightness	200 cd/m²	
	Touch panel	Four-wire resistive touch panel	
	Service life	Above 50000 hours, ambient temperature 25°C, 24 hours operation	
	Processor	Cortex-A7 1GHz	
	Memory	128MB	
Interface	COM1 port	RS232/RS485	
	COM2 port	RS232/RS485/RS422	
	Ethernet port	Standard RJ45, 10/100M	
	USB-A port	Flash disk port, USB2.0 standard	
	4G	Optional	
	WIFI	Optional	
Electrical features	Input voltage	DC24V (voltage range: DC22~DC26V)	
	Power	5W	8W
	Allowable instantaneous power failure	Below 10ms (actual power loss less than 1s)	
	Withstand voltage	AC1000V, 10mA, less than 1 minute (signal and ground)	
	Insulation impedance	Above DC500V, 10MΩ (signal and ground)	
Environment	Operation temperature	0-50°C	
	Storage temperature	-20-60°C	
	Ambient humidity	10%RH~90%RH (no condensation)	
	Vibration resistance	10~25Hz (X, Y, Z direction each 30 minutes 2G)	
	Anti-interference	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute	
	Ambient air	No corrosive gas	
	Protection level	Front panel IP65	
	Cooling method	Natural air cooling	
Structure	External dimension (mm)	205.8*147.2*35.5	277.0*191.7*37.6
	Opening size (mm)	192.1*138.5(±0.1)	260.2*179.7(±0.1)

| Appearance dimension drawing (Unit: mm)

TS5-700

TS5-1000
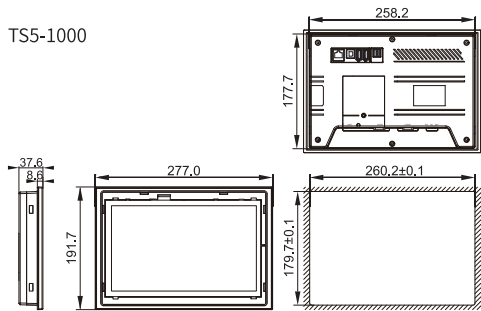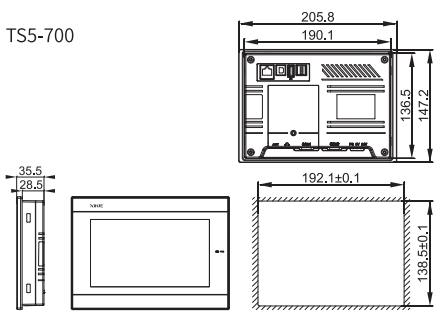
TouchWin Pro software

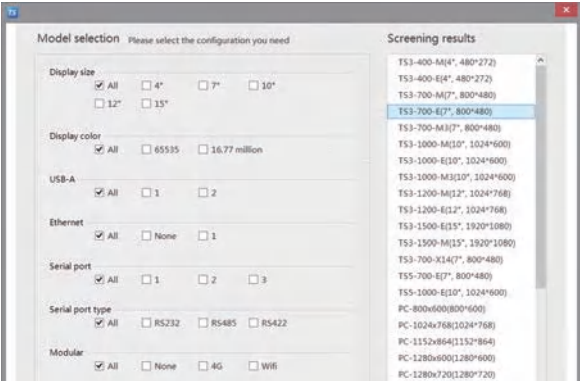Simple and intuitive software interface

Fully considering the convenience and ease of use of user programming

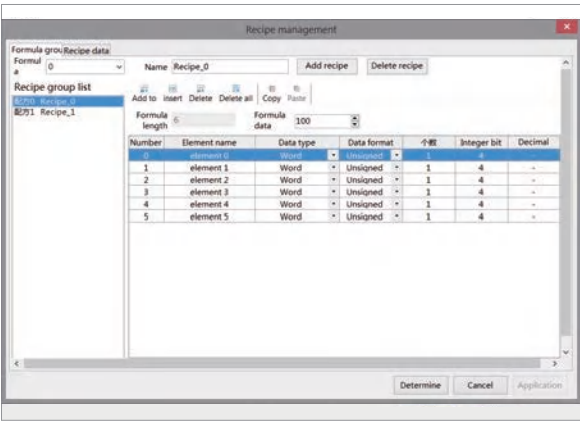Committed to reducing programming time

■ Built-in Model Selection Function

The software has built-in model selection function, which can quickly match the required product model according to your requirements.

■ Rich Material Library

The newly designed material library has a variety of materials to choose from, and pictures can be found through color, shape and so on.

■ Powerful Recipe Management

The new recipe management is simple and easy to edit. It supports editing recipe data on the touch screen, including inserting, deleting, importing, exporting and other operations.
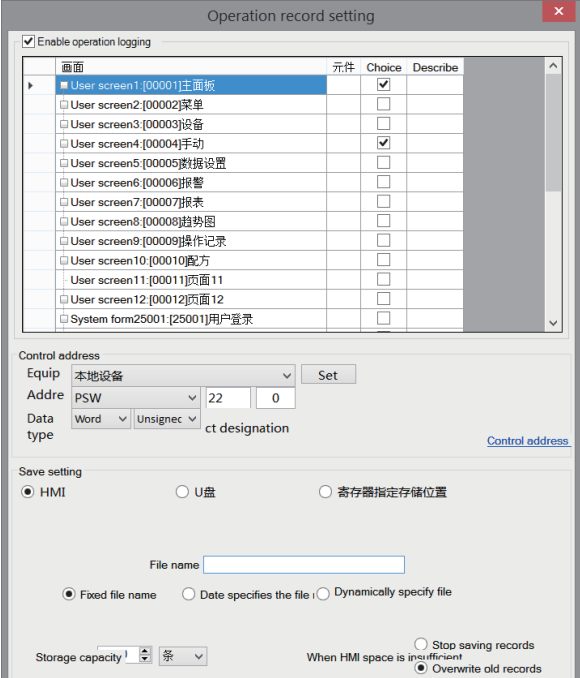
■ Detailed Report Management

The report management method supports the display of tables in forward order/ reverse order. You can query data or alarm records by date and keyword. It can be imported/exported to USB flash disk.
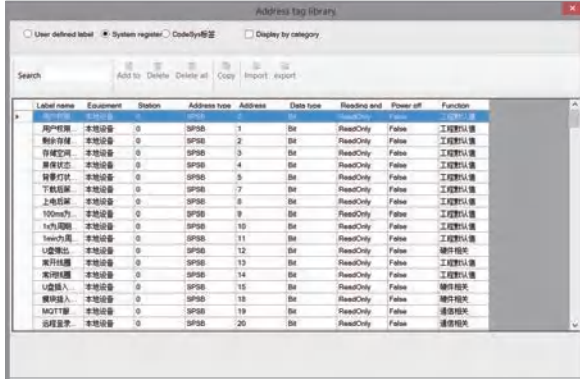
■ Traceable Operation Records

Record user login and operation contents, which can be exported to USB flash disk to help analyze process flow and troubleshooting.
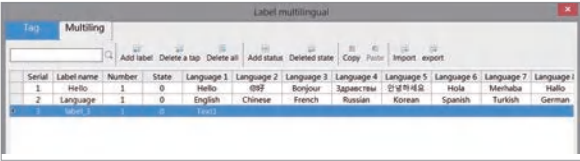
■ Schedule

With timer function, it can set the time and execute it regularly, making the on-site operation more efficient.

■ Address Label Library

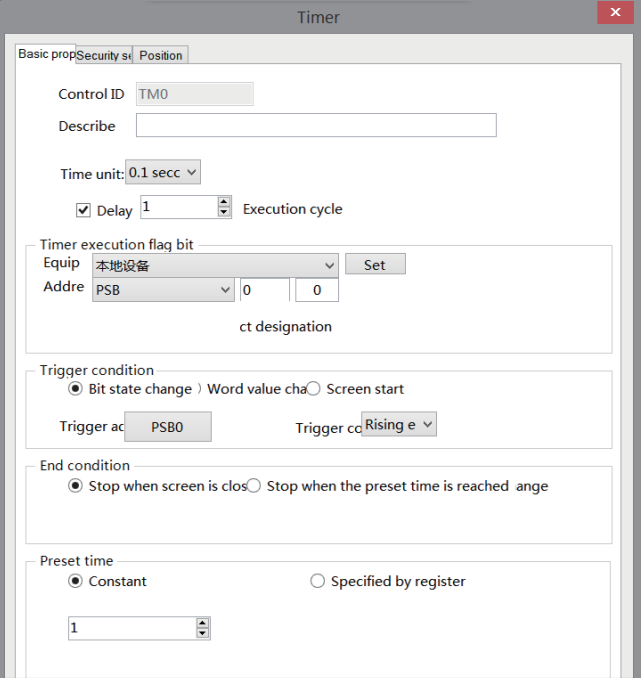The text, address and equipment in the program shall be uniformly managed to facilitate searching and checking.

■ Multiple Encryption Methods

A variety of encryption methods, including delay, interlock, user level and installment payment.

■ Multilingual Management

It supports up to 8 languages and is more convenient to use through multi-language label library management.

■ Support C Language Programming

Support C language function block, which are simple, fast and easy to learn, and support online debugging.

PLC

HMI

Integrated controller

Industrial informatization

Servo system

Frequency system

Stepping system

Vision system

TG series general HMI

3.7-15.6 inches full coverage, 13 branch products to meet a variety of interaction needs of your industrial site

■ Suitable for many occasions

- TG general model
- TG(G) gray ultrathin model
- TG(S) black ultrathin model

■ Suitable for special occasions

- TGM(B) Vehicle, medical, testing
- CCSG Special for marine ships
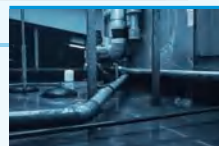- TGM(L) Outdoor occasions

■ Suitable for basic occasions

- TG(S/G)-XT Cost effective
- OP key type operate panel

■ Suitable for harsh environment

- TG(P) Site environment with heavy oil pollution
- TGM(D) Site environment with severe temperature requirements

■ Suitable for network demand occasions

- TGM Ethernet communication

■ Suitable for handheld operation

- MTG handheld wireless operation, built-in mobile power supply
- RT can be operated with one hand and two hands, which is convenient for field test equipment

■ High hardware configuration for higher performance

CPU	Memory	Storage	Color	Capacity
ARM9 core Main frequency 400MHz	128MB/64MB	128MB	16.77 million	4 million words Power off holding area

■ Download, start and run trinity ultra-high speed response

Download

USB high-speed data transmission can greatly reduce the program download time and facilitate debugging

Start

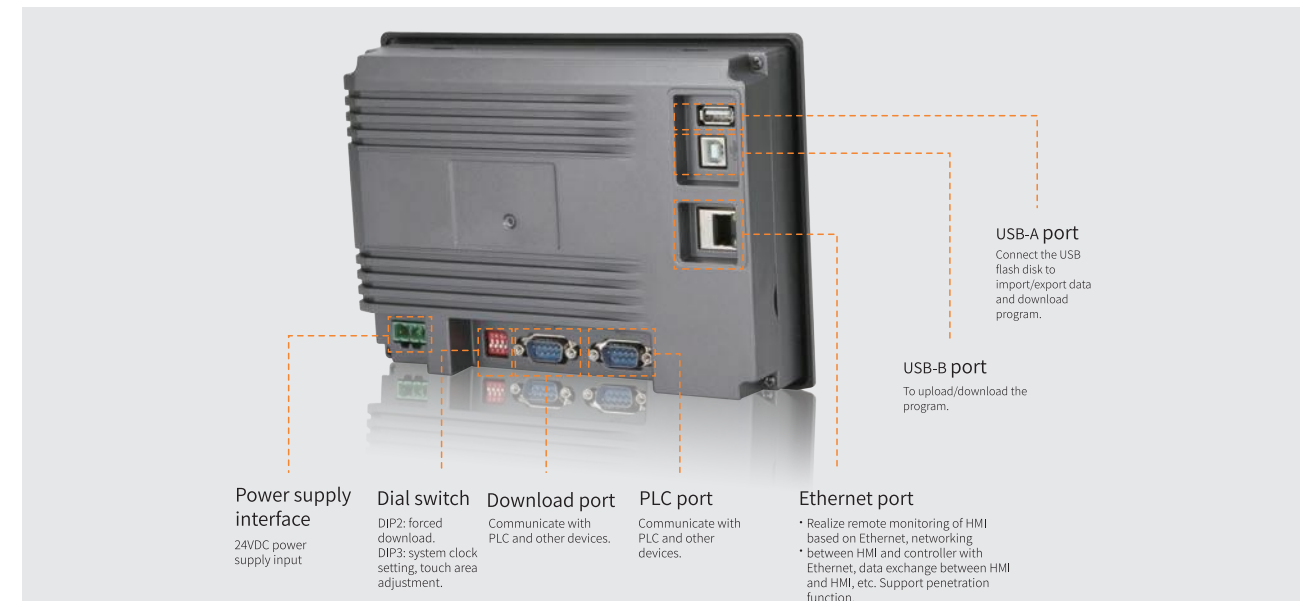Greatly improve the startup speed and reduce the waiting time

Run

Smoother screen switching and animation effect

■ Flexible installation and free choice

Vertical installation or horizontal installation can be freely selected according to the actual needs of the site.

Excellent performance

Rich interface and powerful communication capability

Power supply interface
24VDC power supply input

Dial switch
DIP2: forced download.
DIP3: system clock setting, touch area adjustment.

Download port
Communicate with PLC and other devices.

PLC port
Communicate with PLC and other devices.

Ethernet port
· Realize remote monitoring of HMI based on Ethernet, networking
· between HMI and controller with Ethernet, data exchange between HMI and HMI, etc. Support penetration function.

USB-A port
Connect the USB flash disk to import/export data and download program.

USB-B port
To upload/download the program.

■ Flexible connection and support communication of multiple devices

Flexible connectivity, direct communication with multiple devices

- It can be directly connected with PLC of various mainstream brands such as Mitsubishi, Siemens, Omron and Schneider, and communicate with various frequency converters and controllers such as Mitsubishi, Delta and Inovance.
- It supports communication with standard Modbus protocol controllers, and can connect multiple controllers supporting Modbus protocol at the same communication port, such as PLC, frequency converter, servo driver, instrument, etc.
- Support free protocol communication, and realize free communication of various instruments by flexible programming in C language.

Servo driver   PLC   VFD   Meter

Support micro printer

- The download port can directly drive the micro printer, panel printer and thermal printer with RS232 interface, so as to realize the real-time printing of engineering data and acquisition curve.
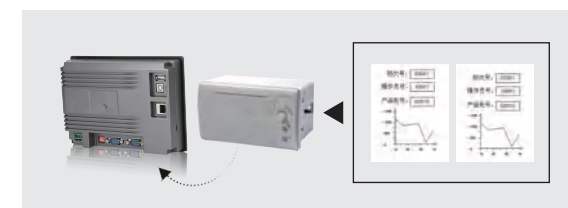
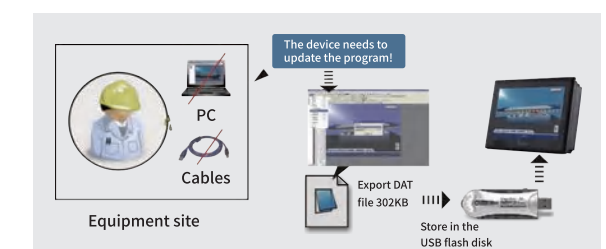
■ Rich download methods

Program download based on USB-B interface

- USB-B interface complies with USB2.0 standard interface, connect the computer with the USB-B port for high-speed data transmission and picture download through the USB communication cable, greatly shorten the download time and make it more convenient for users to debug the program.
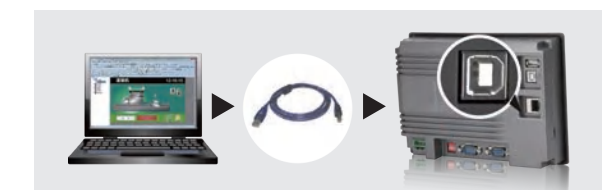
**Use USB flash disk to quickly import the program through USB-A interface**

- TG series models equipped with USB-A interface can directly download the program to HMI without computer but through USB flash disk. The download process is simple and fast, which is conducive to the confidentiality of the program. It is applicable to the situation that the program needs to be upgraded but there is no computer or download cable, saving time and cost.

The device needs to update the program!

PC

Cables

Equipment site

Export DAT file 302KB

Store in the USB flash disk

PLC

HMI

Integrated controller

Industrial informatization

Servo system

Frequency system

Stepping system

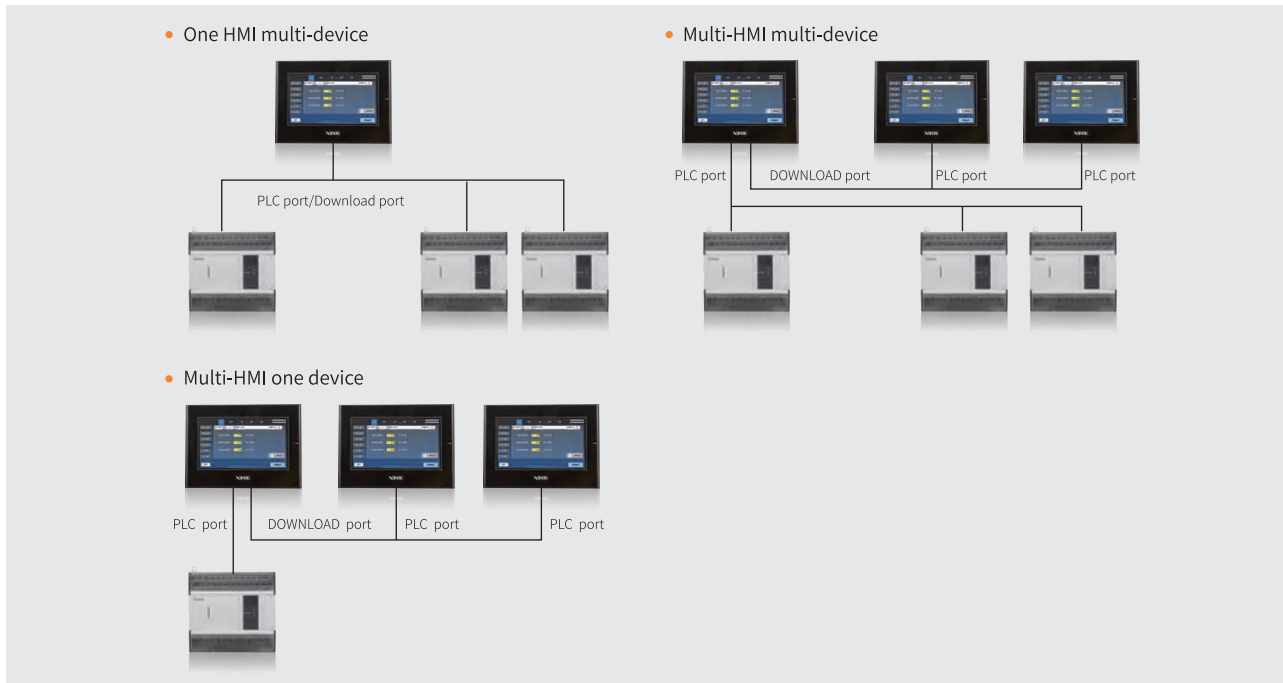Vision system

Excellent performance

From independent stand-alone to network communication,multiple networking mode

■ Support Ethernet communication, improve communication speed, suitable for complex field environment

• Standard RJ45 Ethernet port
• It can form an open network structure with Modbus TCP devices, Siemens S7-1200, S7-300, Mitsubishi Melsec series, Keyence KV5000, LS XGT, Omron Fins TCP series and A-BOX-U.

Switch

S7-300   Keyence KV5000   LSXGT   Mitsubishi Melsec protocol devices   Siemens S7-1200   S7-Smart PLC   Modbus TCP Ethernet devices
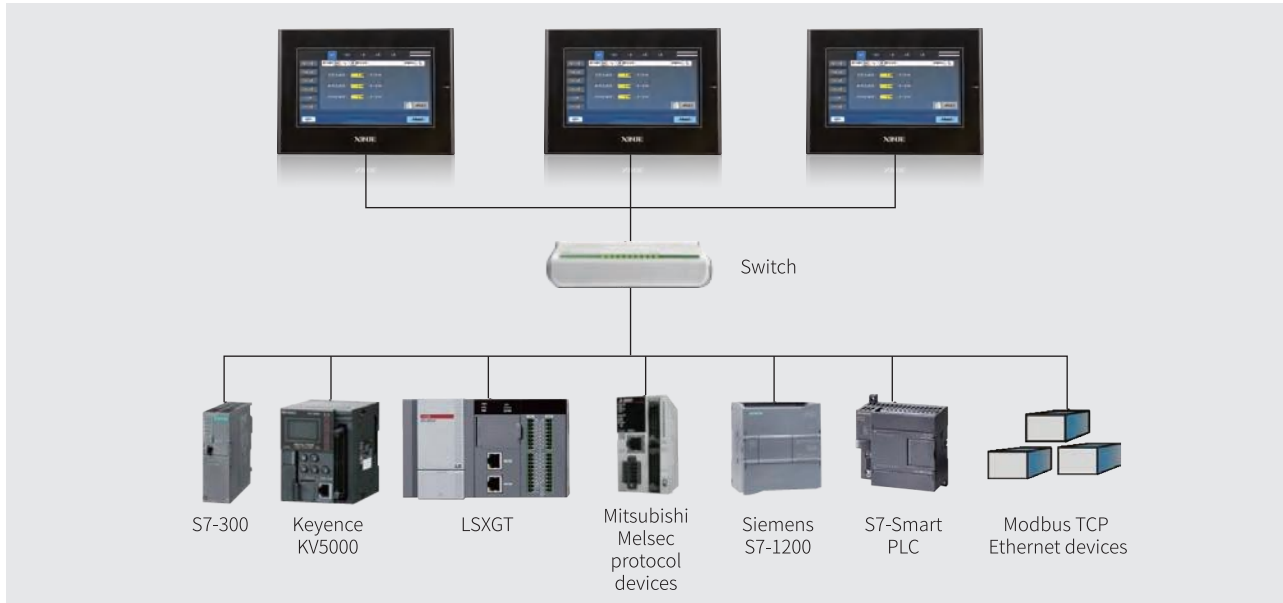
■ Various networking modes
• It can be networked according to the traditional master-slave mode or through X-NET bus.

• One HMI multi-device

PLC port/Download port

• Multi-HMI multi-device

PLC port   DOWNLOAD port   PLC port   PLC port

• Multi-HMI one device

PLC port   DOWNLOAD port   PLC port   PLC port

Wide temperature metal HMI

TGM (D) series   10.1" 7"

• New appearance and structure design, centralized interface
• Ultra thin body
• The metal cover of the whole machine greatly improves the anti-interference and heat dissipation
• The temperature range is -20℃~70℃, suitable for the site environment with high temperature requirements
• More industrial chips are adopted, and the performance is more stable
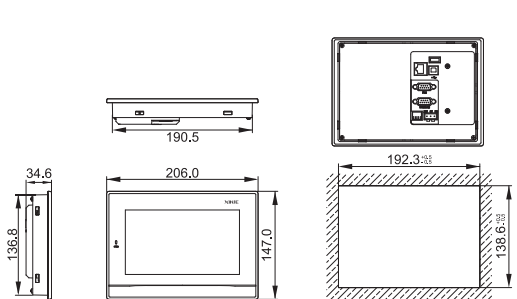
| Product specification

Product model		TGMA63D-ET	TGM765D-ET
Product features	Display size	10.1"	7"
	Resolution	1024*600	800*480
	LCD	TFT LCD display, LED backlight	
	Display color	16.77million colors	
	Brightness	200 cd/m^2	
	Touch panel	Four-wire resistive touch screen	
	LCD life	Above 50000 hours, ambient temperature 25℃, 24-hour operation	
	Memory	128MB	
Interface	PLC port	RS232/RS485/RS422	
	Download port	RS232/RS485	/
	USB-A port	USB flash disk port, USB2.0 standard	
	USB-B port	USB download port, USB2.0 standard	
	Ethernet port	Standard RJ45	
Electrical features	Input voltage	DC24V（voltage range：DC22V-DC26V）	
	Consumption current	270mA	200mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)	
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute (signal and ground)	
	Insulation resistance	Above10MΩ，DC500V	
Environment	Operation temperature	-20-70℃	
	Storage temperature	-30-75℃	
	Operation humidity	10%RH-90%RH (no condensation)	
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute	
	Air	No corrosive gas	
	Cooling mode	Natural air cooling	
	Protection level	Front cover IP65	
Dimension	External dimension (mm)	276.9*191.6*34.8	206.0*147.0*34.6
	Opening size (mm)	260.2*178.7	192.3*138.6

| Appearance dimension drawing (Unit: mm)

TGMA63D-ET   TGM765D-ET

258.2
176.7
276.9   34.8
260.2
191.6
178.7
190.5
34.6
206.0
192.3
136.8
147.0
138.6
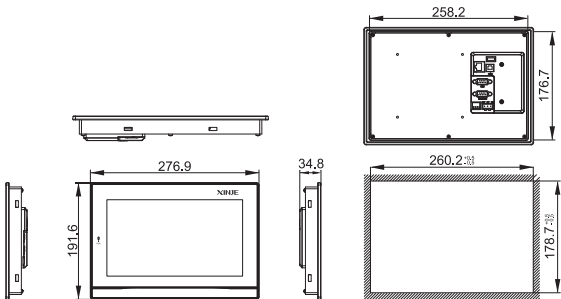
New appearance HMI

TG (G) series   10.1" 7" 4.3"

- The gray appearance design of the whole machine has strong visual impact
- Improved cover material, frosted texture
- The function and performance are the same to TG(S) series
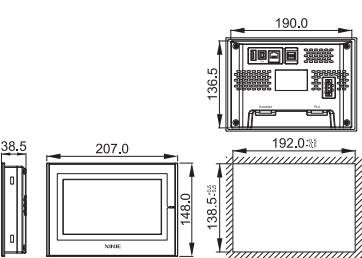
| Product specification

	Product model	TGA63G-MT TGA63G-UT TGA63G-ET	TG765G-MT TG765G-UT TG765G-ET	TG465G-UT TG465G-ET
Product features	Display size	10.1″	7″	4.3"
	Resolution	1024*600	800*480	480*272
	LCD	TFT LCD display, LED backlight		
	Display color	16.77million colors		
	Brightness	200 cd/m²		
	Touch panel	Four-wire resistive touch screen		
	LCD life	Above 50000 hours, ambient temperature 25℃, 24-hour operation		
	Memory	128MB		
Interface	PLC port	RS232/RS422/RS485	RS232/RS422/RS485	RS232/RS485/RS422 (XT model cannot support RS422)
	Download port	RS232/RS485	RS232/RS485	/
	USB-A port	USB flash disk port, USB2.0 standard. UT/ET model can support		
	USB-B port	USB download port, USB2.0 standard		
	Ethernet port	Standard RJ45, ET model can support		
Electrical features	Input voltage	DC24V (voltage range: DC22V~DC26V)		
	Consumption current	270mA	200mA	180mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)		
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute		
	Insulation resistance	Above 10MΩ，DC500V		
Environment	Operation temperature	0℃～50℃		
	Storage temperature	-20℃～60℃		
	Operation humidity	10%RH-90%RH (no condensation)		
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute		
	Air	No corrosive gas		
	Cooling mode	Natural air cooling		
	Protection level	Front cover IP65		
Dimension	External dimension (mm)	278.0*192.3*44.0	207.0*148.0*38.5	152.6*102.0*33.4
	Opening size (mm)	260.2*179.7	192.0*138.5	144.0*94.0

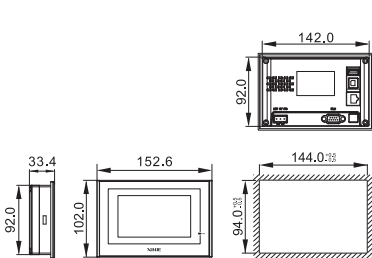## | Appearance dimension drawing (Unit: mm)
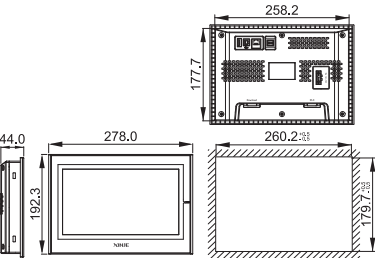
TGA63G-MT/UT/ET   TG765G-MT/UT/ET   TG465G-UT/ET

Ultrathin type HMI

TG (S) series   10.1" 7"

- Ultrathin and fashionable appearance design, 7'' model thickness as low as 38.5mm
- The plastic cover made of PC and ABS alloy material (or flame retardant material) is more solid and durable
- Optimize the snap-fit design to effectively reduce the entry of external dust and oil stain
- The communication interface faces down to effectively save installation space
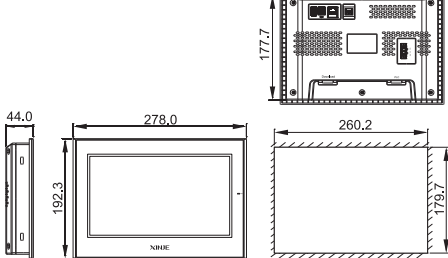
| Product specification

	Product model	TGA63S-MT TGA63S-UT TGA63S-ET	TG765S-MT TG765S-UT TG765S-ET
Product features	Display size	10.1″	7″
	Resolution	1024*600	800*480
	LCD	TFT LCD display, LED backlight	
	Display color	16.77 million colors	
	Brightness	200 cd/m²	
	Touch panel	Four-wire resistive touch screen	
	LCD life	Above 50000 hours, ambient temperature 25℃, 24-hour operation	
	Memory	128MB	
Interface	PLC port	RS232/RS422/RS485	
	Download port	RS232/RS485	
	USB-A port	USB flash disk port, USB2.0 standard. UT/ET model can support	
	USB-B port	USB download port, USB2.0 standard	
	Ethernet port	Standard RJ45, ET model can support	
Electrical features	Input voltage	DC24V （(voltage range: DC22V~DC26V)	
	Consumption current	270mA	200mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)	
	Withstand voltage shock	Above AC1000V, 10mA, less than 1 minute	
	Insulation resistance	10MΩ，DC500V	
Environment	Operation temperature	0℃～50℃	
	Storage temperature	-20℃～60℃	
	Operation humidity	10%RH-90%RH （no condensation)	
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute	
	Air	No corrosive gas	
	Cooling mode	Natural air cooling	
	Protection level	Front cover IP65	
Dimension	External dimension (mm)	278.0*192.3*44.0	207.0*148.0*38.5
	Opening size (mm)	260.2*179.7	192.0*138.5

| Appearance dimension drawing (Unit: mm)

TGA63S-MT/UT/ET   TG765S-MT/UT/ET
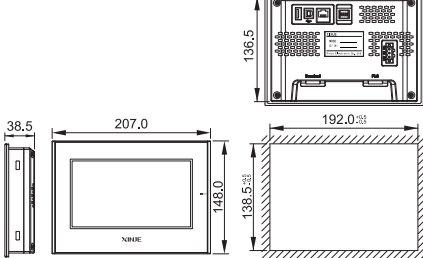
Network type HMI

TGM series   15.6" 10.1" 8" 7" 4.3"

- With penetration function, can upload/download Xinje XD/XL/XG series PLC program through the HMI
- Support three download modes: Ethernet, USB-B, USB flash disk import program
- Ethernet port supports LAN and WAN connection, which is more convenient to use

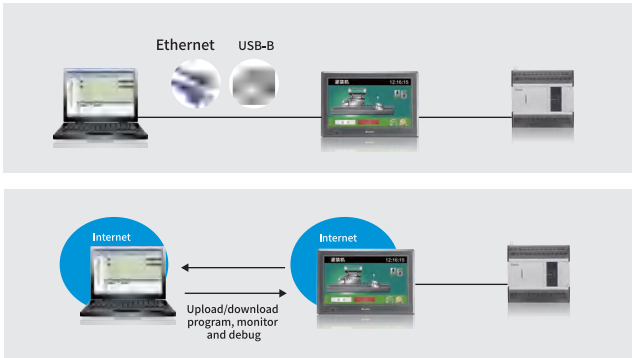### ■ Remote upload/download HMI program through Ethernet port

- TGM series HMI supports three download modes: Ethernet download, USB-B download, USB flash disk import. Ethernet download supports LAN and WAN, greatly improves the download speed and facilitates program debugging and later maintenance.

Ethernet   USB-B   USB flash disk

Internet   Internet

Upload/download program, monitor and debug
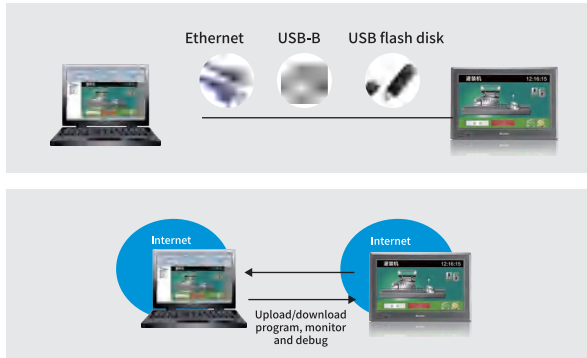
■ Penetration function

Support Ethernet communication, improve communication speed, suitable for complex field environment

- Xinje XG/XL/XD series PLC program can be downloaded/uploaded and monitored through the HMI. The connection method can be Ethernet or USB. Ethernet mode supports LAN and remote operation.
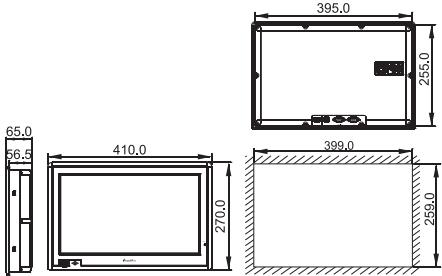
Ethernet   USB-B

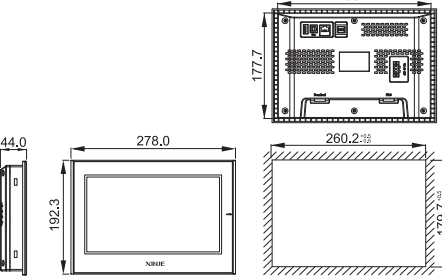Internet   Internet

Upload/download program, monitor and debug
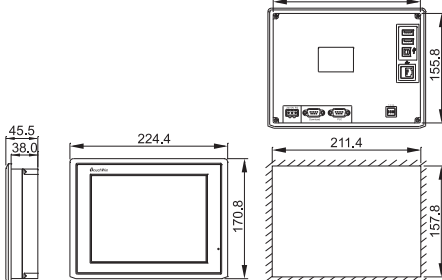
| Appearance dimension drawing (Unit: mm)
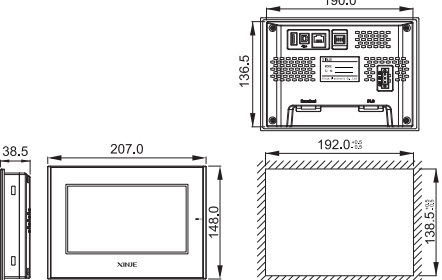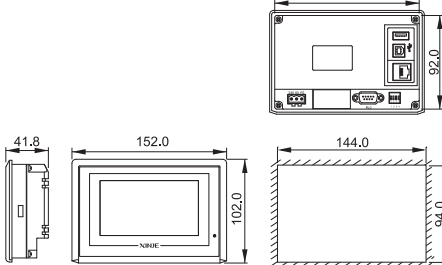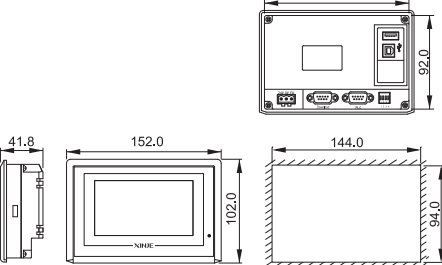

TGMC65-ET

TGMA63S-MT/ET

TGM865-ET

TGM765S-MT/ET

TGM465-ET

TGM465-MT2

| Product specification

Product model		TGMC65-ET	TGMA63S-MT TGMA63S-ET	TGM865-ET	TGM765S-MT TGM765S-ET	TGM465-MT2 TGM465-ET
Product features	Display size	15.6″	10.1″	8″	7″	4.3″
	Resolution	1366*768	1024*600	800*600	800*480	480*272
	LCD	TFT LCD display, LED backlight				
	Display color	16.77 million colors				
	Brightness	250 cd/m²	200 cd/m²			
	Touch panel	Four-wire resistive touch screen				
	LCD life	Above 50000 hours, ambient temperature 25℃, 24-hour operation				
	Memory	128MB				
Interface	PLC port	RS232/RS422/RS485				
	Download port	RS232/RS485 (TGM465-ET no donwload port)				
	USB-A port	USB flash disk port, USB2.0 standard				
	USB-B port	USB download port, USB2.0 standard				
	Ethernet port	Standard RJ45, ET model can support				

| Product specification

Product model		TGMC65-ET	TGMA63S-MT TGMA63S-ET	TGM865-ET	TGM765S-MT TGM765S-ET	TGM465-MT2 TGM465-ET
Electrical features	Input voltage	DC24V (voltage range: DC22V~DC26V)				
	Consumption current	730mA	270mA	250mA	200mA	180mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)				
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute				
	Insulation resistance	Above 10MΩ, DC500V				
Environment	Operation temperature	0℃～50℃				
	Storage temperature	-20℃～60℃				
	Operation humidity	10%RH~90%RH (no condensation)				
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute				
	Air	No corrosive gas				
	Cooling mode	Natural air cooling				
	Protection level	Front cover IP65				
Dimension	External dimension (mm)	410.0*270.0*65.0	278.0*192.3*44.0	224.4*170.8*45.5	207.0*148.0*38.5	152.0*102.0*41.8
	Opening size (mm)	399.0*259.0	260.2*179.7	211.4*157.8	192.0*138.5	144.0*94.0

General HMI

TG series   15.6" 10.1" 8" 7" 4.3"

- Covering complete display size, the product lineup is abundant
- It has various functions and is suitable for most industrial sites
- USB-A front port design, easy to use (TGC65, TGA62 support)

■ **USB-A front interface design, more convenient operation**   TGC65|TGA62support

USB-A interface is used for data import and export. This interface is designed on the front of the panel. When transmitting data, there is no need to open the control cabinet. It is easy to operate and greatly improves the work efficiency.
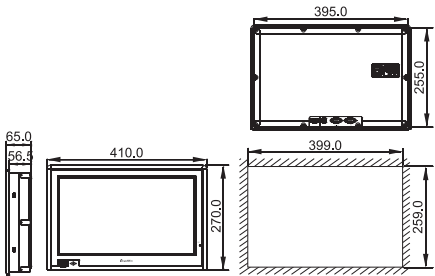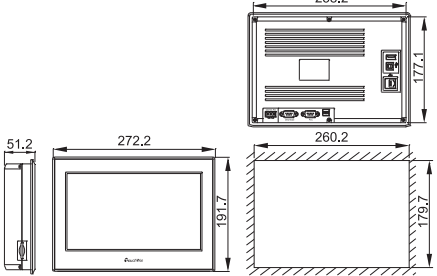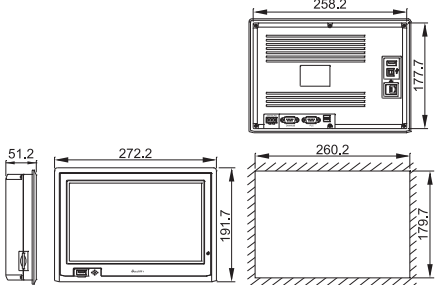
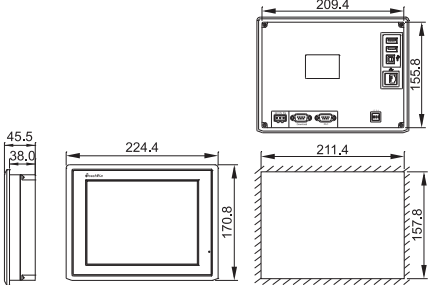## Appearance dimension drawing (Unit: mm)

TGC65-ET

TGA63-MT/UT/ET/NT

TGA62-MT/ ET

TG865-MT/ ET

TG765-MT/ UT/ ET
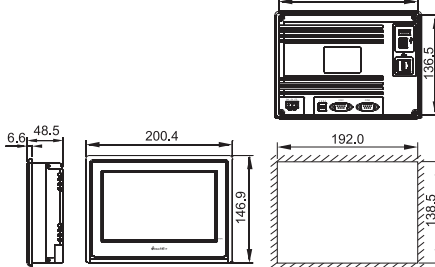
TG465- MT2/ UT2

TG465-MT/ UT/ ET/ XT

Product specification

	Product model	TGC65-ET	TGA63-MT TGA63-UT TGA63-ET	TGA62-MT TGA62-ET	TG865-MT TG865-ET	TG765-MT TG765-UT TG765-ET	TG465-MT TG465-UT TG465-ET	TG465-MT2 TG465-UT2 TG465-XT
Product features	Display size	15.6″	10.1″	10.1″	8″	7″	4.3″	
	Resolution	1366*768	1024*600	800*480	800*600	800*480	480*272	
	LCD	TFT LCD display, LED backlight						
	Display color	16.77 million colors						
	Brightness	250 cd/m^2	200 cd/m^2					
	Touch panel	Four-wire resistive touch screen						
	LCD life	Above 50000 hours, ambient temperature 25°C, 24-hour operation						
	Memory	128MB						
Interface	PLC port	RS232/RS422/RS485						
	Download port	RS232/RS485					RS232/RS485 (only -MT2/UT2 model support)	
	USB-A port	USB flash disk port, USB2.0 standard. UT/ET model can support						
	USB-B port	USB download port, USB2.0 standard						
	Ethernet port	Standard RJ45, ET model can support						
Electrical features	Input voltage	DC24V (voltage range: DC22V~DC26V)						
	Consumption current	730mA	270mA		250mA	200mA	180mA	
	Allowable power loss	Below 10ms (actual power loss less than 1s)						
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute						
	Insulation resistance	Above10MΩ，DC500V						
Environment	Operation temperature	0℃～50℃						
	Storage temperature	-20℃～60℃						
	Operation humidity	10%RH-90%RH (no condensation)						
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute						
	Air	No corrosive gas						
	Cooling mode	Natural air cooling						
	Protection level	Front cover IP65						
Dimension	External dimension (mm)	410.0*270.0*65.0	272.2*191.7*51.2	272.2*191.7*51.2	224.4*170.8*45.5	200.4*146.9*48.5	152.0*102.0*41.8	
	Opening size (mm)	399.0*259.0	260.2*179.7	260.2*179.7	211.4*157.8	192.0*138.5	144.0*94.0	

PLC
HMI
Integrated controller
Industrial information
Servo system
Frequency system
Stepping system
Vision system

Highlight type HMI

TGM(L) series 7"

- Based on the network series products (TGM), the brightness is increased to 530,which can be used in outdoor occasions

| Product specification

Product model		TGM765L-MT	TGM765L-ET
Product features	Display size	7"	
	Resolution	16.77 million colors	
	LCD	800*480	
	Display color	530 cd/m²	
	Brightness	Four-wire resistive touch screen	
	Touch panel	Above 50000 hours, ambient temperature 25℃, 24-hour operation	
	LCD life	128MB	
Interface	Memory	RS232/RS485/RS422	
	PLC port	RS232/RS485	
	Download port	USB flash disk port, USB2.0 standard	
	USB-A port	USB download port, USB2.0 standard	
	USB-B port	/	Standard RJ45
	Ethernet port	DC24V (voltage range: DC22V~DC26V)	
Electrical features	Input voltage	200mA	
	Consumption current	Below 10ms (actual power loss less than 1s)	
	Allowable power loss	AC1000V, 10mA, less than 1 minute (signal and ground)	
	Withstand voltage shock	Above 10MΩ, DC500V (signal and ground)	
Environment	Insulation resistance	0-50℃	
	Operation temperature	-20-60℃	
	Storage temperature	10%RH-90%RH（no condensation)	
	Operation humidity	10~25Hz (X, Y, Z direction each 30 minutes 2G)	
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute	
	Air	No corrosive gas	
	Cooling mode	Front cover IP65	
	Protection level	Natural air cooling	
Dimension	External dimension (mm)	207.0*148.0*38.5	
	Opening size (mm)	192.0*138.5	

| Appearance dimension drawing (Unit: mm)

TGM765L-MT/ET
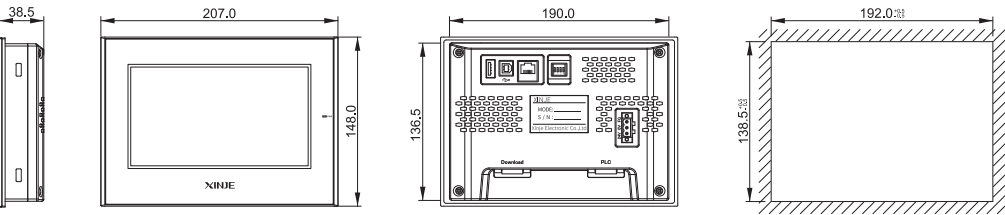
Oil resistant type HMI

TG（P）series 10.1" 7" 4.3"

- The oil resistant type redesign the upper cover and film on the basis of the general TG series products, and increase the width of the back glue of the film, so as to achieve the purpose of more oil resistance on the front
- It is applicable to the environment with heavy oil pollution, and other functions are the same as the general type

| Product specification

Product model		TGA62-MT(P) TGA62-ET(P)	TG765-MT(P) TG765-UT(P)	TG765-XT(P)-C	TG465-MT(P)
Product features	Display size	10.1"	7"	7"	4.3"
	Resolution	800*480	800*480	800*480	480*272
	LCD	TFT LCD display, LED backlight			
	Display color	16.77 million colors			
	Brightness	200 cd/m²			
	Touch panel	Four-wire resistive touch screen			
	LCD life	Above 50000 hours, ambient temperature 25℃, 24-hour operation			
	Memory	128MB			
Interface	PLC port	RS232/RS422/RS485		RS232	RS232/RS422/RS485
	Download port	RS232/RS485		/	/
	USB-A port	USB flash disk port, USB2.0 standard, UT(P)/ET(P) models support			
	USB-B port	USB download port, USB2.0 standard			
	Ethernet port	Standard RJ45, ET(P) models support		/	/
Electrical features	Input voltage	DC24V (voltage range: DC22V~DC26V)			
	Consumption current	270mA	200mA	200mA	180mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)			
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute			
	Insulation resistance	Above 10MΩ，DC500V			
Environment	Operation temperature	0℃～50℃			
	Storage temperature	-20℃～60℃			
	Operation humidity	10%RH~90%RH (no condensation)			
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute			
	Air	No corrosive gas			
	Cooling mode	Natural air cooling			
	Protection level	Front cover IP65			
Dimension	External dimension (mm)	272.2*191.7*51.2	200.4*146.9*48.5	200.4*146.9*48.5	152.0*102.0*41.8
	Opening size (mm)	260.2*179.7	192.0*138.5	192.0*138.5	144.0*94.0

| Appearance dimension drawing (Unit: mm)
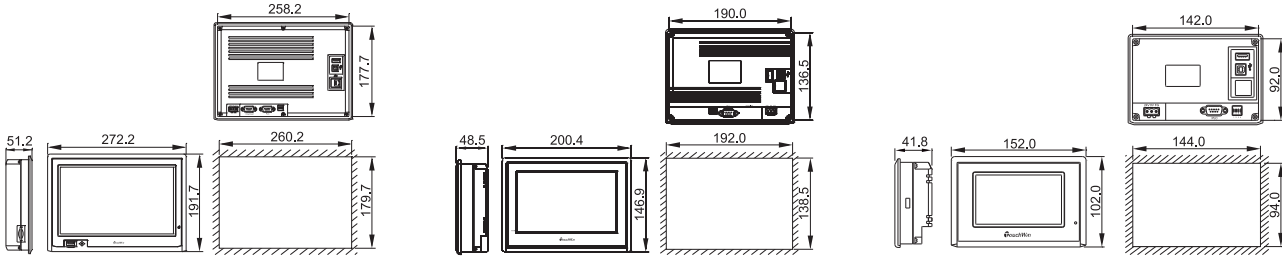
TGA62-MT(P)/ ET(P)　　　　TG765-MT(P)/ UT(P) /XT(P)-C　　　　TG465-MT(P)

Economic type HMI

Economic type TG series 7" 4.3"

TG-XT
- On the basis of general type TG/ultra-thin type TG(S)/new appearance TG(G) series products, one or two RS232 serial ports are reserved, with standard clock function
  Note: the serial port only supports RS232 communication mode

TG-ZT
- Remove RS422 communication mode on the basis of new appearance TG(G) series products
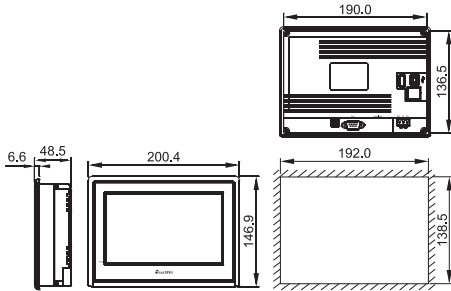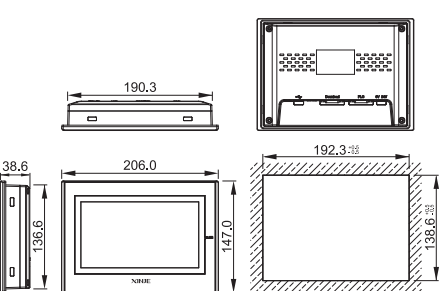 Note: the internal register PFW is stored every 1 minute

Appearance dimension drawing (Unit: mm)

TG765-XT-C

TG765S-XT

TG765G-XT/ZT

TG465G-ZT

Product specification

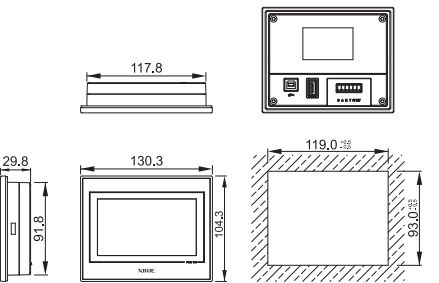| Product model		TG765-XT-C	TG765S-XT	TG765G-XT	TG765G-ZT	TG465G-ZT
Product features	Display size			7"		4.3"
	Resolution			800*480		480*272
	LCD			TFT LCD display, LED backlight		
	Display color	16.77million colors	16.77million colors	16.77 million colors	65535 colors	
	Brightness			200 cd/m²		
	Touch panel			Four-wire resistive touch screen		
	LCD life			Above 50000 hours, ambient temperature 25℃, 24-hour operation		
	Memory	128MB	128MB	128MB		64MB
Interface	PLC port	RS232	RS232	RS232	RS232/RS485	RS485
	Download port	/	RS232	RS232	RS232	RS232
	USB-A port	/	/	/	USB-A (USB2.0 standard), USB flash disk port	
	USB-B port			USB-B (USB2.0 standard), USB download port		
	Ethernet port			/		
Electrical features	Input voltage			DC24V (voltage range: DC22V~DC26V)		
	Consumption current			200mA		180mA
	Allowable power loss		Below 10ms (actual power loss less than 1s)		/	
	Withstand voltage shock		AC1000V, 10mA, less than 1 minute		/	
	Insulation resistance		Above10MΩ，DC500V		/	
Environment	Operation temperature			0℃～50℃		
	Storage temperature			-20℃～60℃		
	Operation humidity			10%RH-90%RH (no condensation)		
	Anti-interference ability			Voltage noise: 1500Vp-p, pulse width 1us, 1 minute		
	Air			No corrosive gas		
	Cooling mode			Natural air cooling		
	Protection level			Front cover IP65		
Dimension	External dimension (mm)	200.4*146.9*48.5	206.0*147.0*38.6	206.0*147.0*38.6	206.0*147.0*38.6	130.3*104.3*29.8
	Opening size (mm)		192.0*138.5			119.0*93.0

Embedded without border HMI

TGM(B) series 10.1" 7" 4.3"

- No front cover, rear installation, greatly reducing the installation space
- It fits closely with the surface of the equipment for better fusion
- Users can design their own mask to meet the needs of personalized customization
- It is especially suitable for vehicle, medical, testing and other applications

| Product specification

| Product model		TGMA63B-ET	TGM765B-MT/UT	TGM465B
Product features	Display size	10.1"	7"	4.3"
	Resolution	1024*600	800*480	480*272
	LCD	TFT LCD display, LED backlight		
	Display color	16.77 million colors		
	Brightness	200 cd/m²		
	Touch panel	Four-wire resistive touch screen		
	LCD life	Above 50000 hours, ambient temperature 25℃, 24-hour operation		
	Memory	128MB		64MB
Interface	PLC port	RS232/RS485/RS422		RS485
	Download port	RS232/RS485	/	RS232
	USB-A port	USB flash disk port, USB2.0 standard, ET models supportUSB		
	USB-B port	USB download port, USB2.0 standard		
	Ethernet port	Standard RJ45 port, ET models support		/
Electrical features	Input voltage	DC24V (voltage range: DC22V~DC26V)		
	Consumption current	270mA	200mA	180mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)		
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute		
	Insulation resistance	Above 10MΩ, DC500V		
Environment	Operation temperature	0℃~50℃		
	Storage temperature	-20℃~60℃		
	Operation humidity	10%RH~90%RH (no condensation)		
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute		
	Air	No corrosive gas		
	Cooling mode	Natural air cooling		
	Protection level	/		
Dimension	External dimension (mm)	272.0*155.2*34.9	182.4*108.5*39.0	128.0*75.0*27.6
	Opening size (mm)	257.0*90	174.4*65.1	118.0*67.0

| Appearance dimension drawing (Unit: mm)

TGMA63B-ET
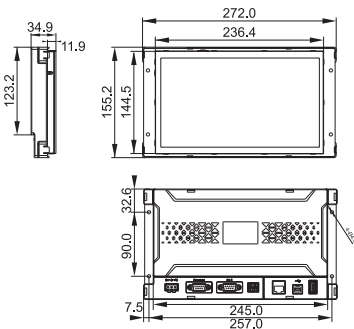
TGM765B-MT/ET
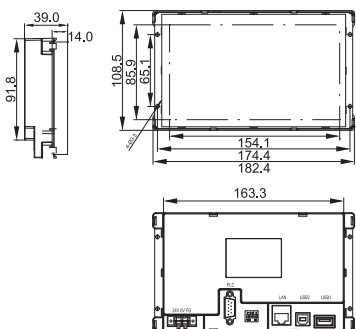
TGM465B
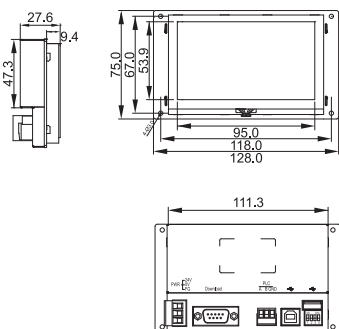
Handheld wireless HMI

MTG series 7"

- Exquisite appearance, handheld operation, more flexible
- Built-in mobile power supply, convenient charging and long battery life
- Wireless communication with PLC, fast air transmission speed (up to 115200bps), long communication distance and strong stability

| Product specification

Product model		MTG765-HT
Product specification	Display size	7.0"
	Display color	16.77 million colors
	Resolution	800*480
	Brightness	Adjustable (system register PFW100)
	Touch panel	Four-wire resistive touch panel
	Service life	Above 50000 hours, ambient temperature 25℃, 24-hour operation
	Character setting	Chinese, English, Japanese, Russian, German, etc
	Character size	Any font and size
Memory	Memory	128MB
Screen features	Power	4W
	Charging parameters	5.0V-2.0A 9.0V-2.0A 12.0V-1.5A
	Endurance time (always on)	8 hours
	Charging time	<10 hours
Electrical features	Operation temperature	0-45℃
	Ambient humidity	10%RH-90%RH (no condensation)
	Ambient air	No corrosive gas
	Protection level	The front panel complies with IP65
	Cooling method	Natural air cooling
Structure	External dimension (mm)	217.1*158.0*36.6
Product model	PLC port (built-in)	Built-in PLC port integrated wireless communication module
	USB-A port	USB flash disk port, USB2.0 standard
	USB-B port	USB download port, USB2.0 standard
	Micro-USB	Micro-USB, USB charging port
	Ethernet port	Standard RJ45 port

| Appearance dimension drawing (Unit: mm)

MTG765-HT
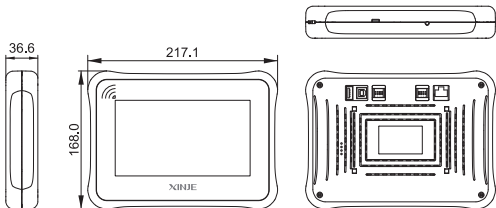
Handheld teaching pendant

RT760 series 7"

- Fully consider the convenience of use, ergonomic holding structure, easy to hold with one hand and two hands
- The back magnet design can liberate hands and mobile operation without place limit
- All round reassuring protection, and the protection grade of the whole machine can reach IP66
- Fast and convenient programming

Product specification

Product model		RT760
Product features	Display size	7"
	Resolution	800*480
	Display	16.77 million colors, TFT LCD display, LED backlight
	Brightness	200 cd/㎡
	Touch panel	Four-wire resistive touch panel
	Button	20 film buttons, the function can be set freely
	Memory	128MB
Interface	PLC port	RS485
	USB-A port	USB flash disk port, USB2.0 standard
	USB-B port	USB download port, USB2.0 standard
Electrical features	Input voltage	DC24V (voltage range: DC22V~DC26V))
	Consumption current	200mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)
Environment	Operation temperature	0-50℃
	Storage temperature	-20-60℃
	Operation humidity	10%RH-90%RH (no condensation)
	Protection level	IP66 for the whole machine

Appearance dimension drawing (Unit: mm)

RT760
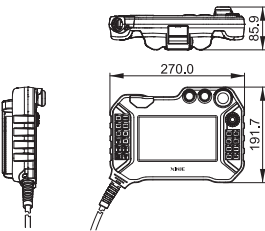
RT710/RT720/RT750 series 7"

- Convenient field equipment test, widely used in manufacturing and industrial robot industry
- Golden ratio grip feeling, extremely suitable for one hand or two hands operation habits
- Application development is simple and fast

Product specification

Product model		RT711	RT712	RT720	RT750
features	Size	7"			
	Resolution	800*480			
	Display	TFT LCD display, LED backlight, 16.77 million colors			
	Brightness	200 cd/㎡			
	Touch panel	Four-wire resistive touch panel			
	Button	/		12 membrane buttons	14 membrane buttons
	Brake switch	Emergency stop switch can effectively ensure the safety of the system in case of abnormal emergency			
	Memory	128MB			
	Communication port	RS485			
	USB-A port	USB flash disk port, USB2.0 standard			
	USB-B port	USB download port, USB2.0 standard	/	USB download port, USB2.0 standard	
	Input voltage	DC24V (voltage range: DC22V~DC26V)			
	Operation temperature	0-50℃			
	Storage temperature	-20-60℃			
	Operation humidity	10%RH~90%RH (no condensation)			

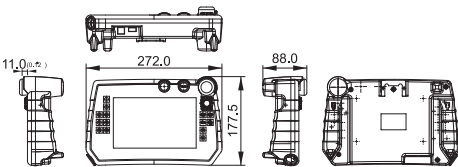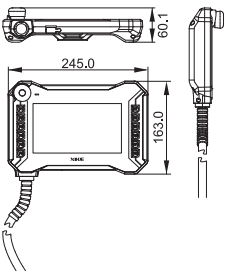### Appearance dimension drawing (Unit: mm)
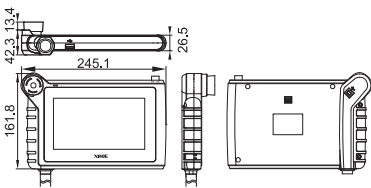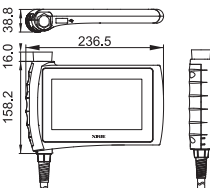
RT711　　RT712　　RT750

RT720

HMI special for ship navigation

CCSG series　15.6" 10.1" 7"

- Certified by China Classification Society, it is applicable to ships and marine facilities to meet the specific needs of the environment and ensure the stable and reliable operation of the system

| Product specification

Product model		CCSG-C65ET	CCSG-A62MT CCSG-A62ET	CCSG-765MT CCSG-765UT CCSG-765ET
Product features	Display size	15.6″	10.1″	7″
	Resolution	1366*768	1024*600	800*480
	LCD	TFT LCD display, LED backlight, 16.77 million colors		
	Display color	16.77 million colors		
	Brightness	250 cd/m^2	200 cd/m^2	
	Touch panel	Four-wire resistive touch panel		
	LCD life	Above 50000 hours, ambient temperature 25℃, 24-hour operation		
	Memory	128MB		
Interface	PLC port	RS232/RS422/RS485		
	Download port	RS232/RS485		
	USB-A port	USB flash disk port, USB2.0 standard, UT/ET models support		
	USB-B port	USB download port, USB2.0 standard		
	Ethernet port	Standard RJ45 port, ET models support		
Electrical features	Input voltage	DC24V (voltage range: DC22V~DC26V)		
	Consumption current	730mA	270mA	200mA
	Allowable power loss	Below 10ms (actual power loss less than 1s)		
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute		
	Insulation resistance	Above 10MΩ, DC500V		
Environment	Operation temperature	0℃～50℃		
	Storage temperature	-20℃～60℃		
	Operation humidity	10%RH~90%RH (no condensation)		
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute		
	Air	No corrosive gas		
	Cooling mode	Natural air cooling		
	Protection level	Front cover IP65		
Dimension	External dimension (mm)	410.0*270.0*65.0	278.0*192.3*44.0	207.0*148.0*38.5
	Opening size (mm)	399.0*259.0	260.2*179.7	192.0*138.5

| Appearance dimension drawing (Unit: mm)

CCSG-C65ET   CCSG-A62MT/ET   CCSG-765MT/UT/ET
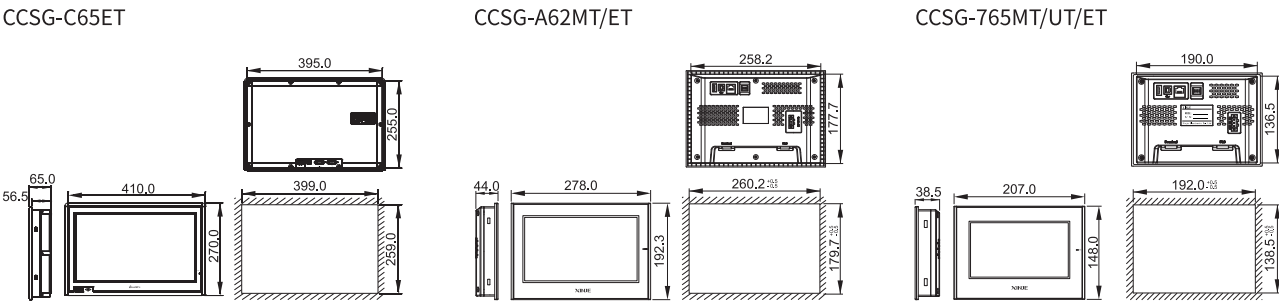
# Operate panel

OP series　3.7"

- OP series button type small-sized HMI, small and exquisite appearance
- The key function can be customized and can replace the mechanical button
- It has the basic functions of alarm, password, clock (optional), display bitmap, PLC control screen switching and so on
- Support the mainstream PLC and other control equipment in the market

| Product specification

Product model		OP330	OP320-A OP320-A-S	OP320 OP320-S
Product features	Display size	3.7″		
	Resolution	192*64		
	LCD	STN		
	Display color	Yellow green color		
	Brightness	Potentiometer adjustable		
	Touch panel	Not support		
	LCD life	Above 20000 hours, ambient temperature 25℃, 24-hour operation		
	Memory	64KB FlashROM		
	Character setting	Chinese, English		
	Character size	Chinese：16*16 32*32 English: 8*16 16*32		
	Button	26	20	7
Interface	Communication port	general models support RS232/RS422, (-S) model supports RS232/RS485		
	Download port	RS232		
	USB-A port	/		
	USB-B port	/		
	Ethernet port	/		
Electrical features	Input voltage	DC24V (DC22V~26V)		
	Consumption current	<140mA		
	Allowable power loss	Below 10ms (actual power loss less than 1s)		
	Withstand voltage shock	AC1000V, 10mA, less than 1 minute		
	Insulation resistance	Above10MΩ, DC500V		
Environment	Operation temperature	0℃～50℃		
	Storage temperature	-20℃～60℃		
	Operation humidity	10%RH～90%RH(no condensation)		
	Anti-interference ability	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute		
	Air	No corrosive gas		
	Cooling mode	Natural air cooling		
	Protection level	Front cover IP65		
Dimension	External dimension (mm)	172.0*121.0*56.5	172.0*94.0*30.0	162.0*102.0*38.0
	Opening size (mm)	164.0*113.0	164.2*86.8	156.5*94.0

| Appearance dimension drawing (Unit: mm)

OP330   OP320-A/OP320-A-S   OP320/OP320-S
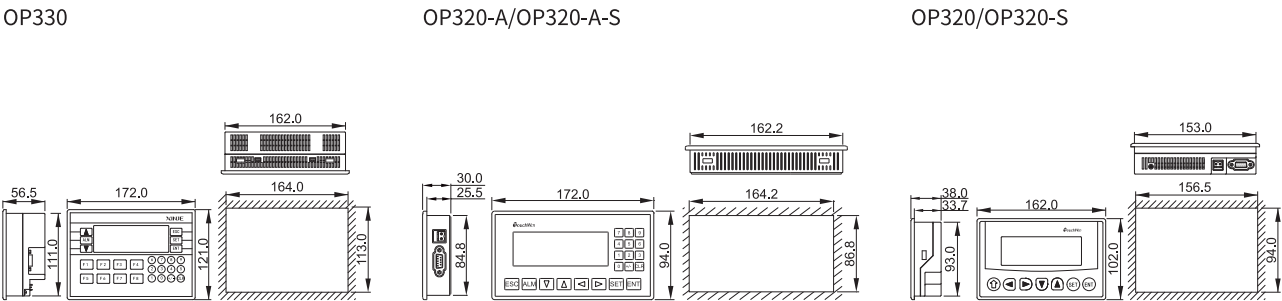
TouchWin

Outstanding picture expressiveness

■ Rich 3D gallery and components resources

■ Support multiple languages and simple switching

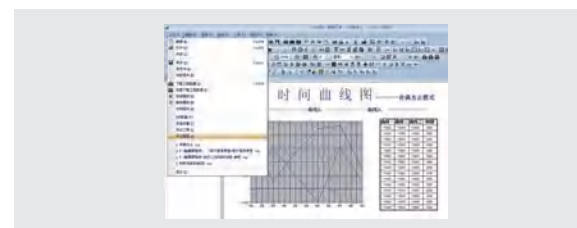### ■ Program confidentiality function

Program.bxp

Encrypted save

■ Various character forms

welcome to use Xinje HMI

inviter is utiliser Xinje HMI

■ New animation editing method, rich performance

Rotate animation   Translating animation
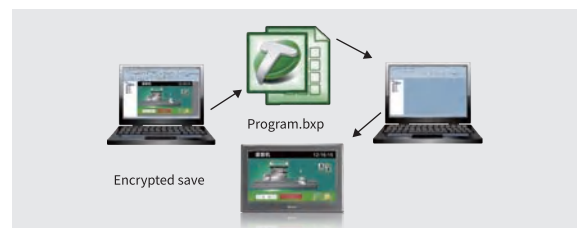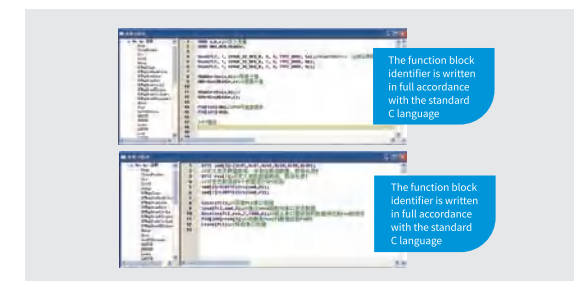
■ Translating animation

Rich functional components

C language function block, operation, command and communication are omnipotent

• C language function block meets more complex computing and communication needs, give full play to the system functions and better serve customers.

■ Support most standard C functions

The function block identifier is written in full accordance with the standard C language

The function block identifier is written in full accordance with the standard C language

■ The function can be encrypted separately. You need to enter a password to view the function content, which protects the rights and interests of usersguage
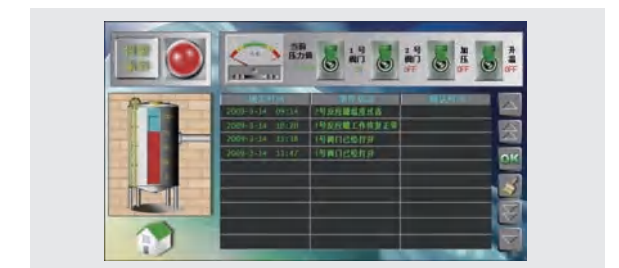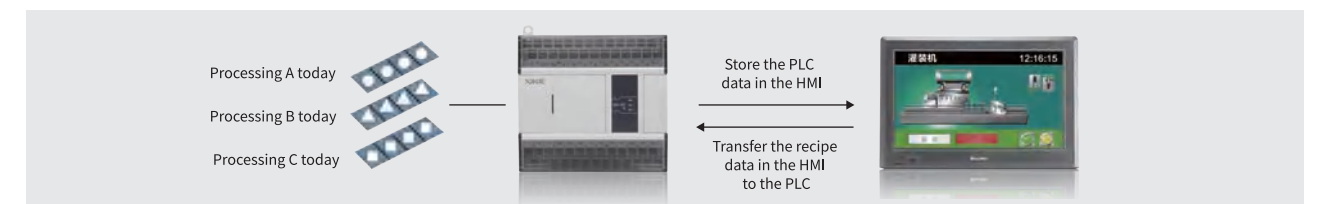

Strong data processing capability

■ Process control data acquisition function, and the trend chart display is more intuitive

■ The alarm function allows the system to recover quickly

■ The storage and bidirectional transmission of recipe data greatly improve the work efficiency

Processing A today

Processing B today

Processing C today

Store the PLC data in the HMI

Transfer the recipe data in the HMI to the PLC

■ Export CSV format data through USB flash disk, backup important data

PLC

HMI

Integrated controller

Industrial informatization

Servo system

Frequency system

Stepping system

Vision system