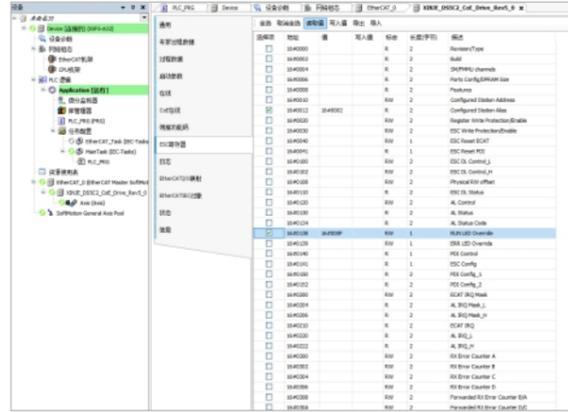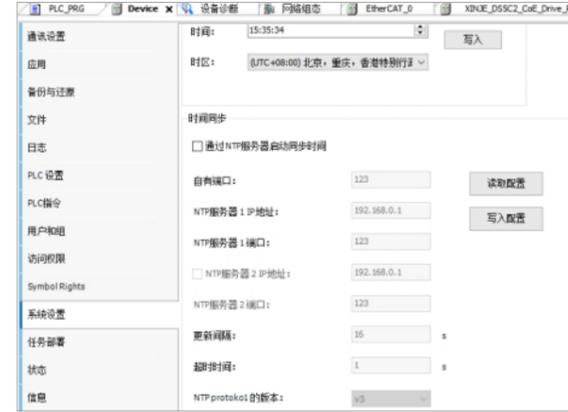# XS Studio is compatible with XS series PLC

■ ESC registers
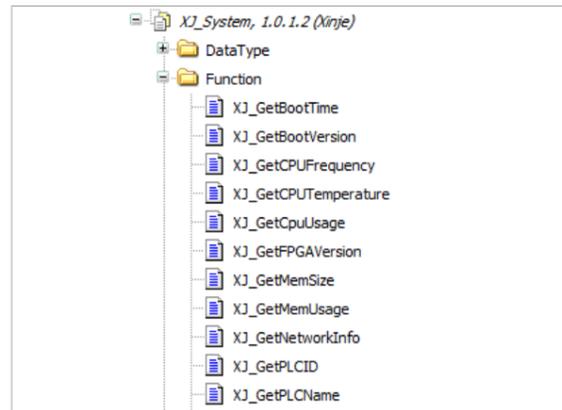

■ NTP clock synchronization

| Comprehensive libraries

System libraries

- XJ_System, 1.0.1.2 (Xinje)
  - DataType
  - Function
    - XJ_GetBootTime
    - XJ_GetBootVersion
    - XJ_GetCPUFrequency
    - XJ_GetCPUTemperature
    - XJ_GetCpuUsage
    - XJ_GetFPGAVersion
    - XJ_GetMemSize
    - XJ_GetMemUsage
    - XJ_GetNetworkInfo
    - XJ_GetPLCID
    - XJ_GetPLCName

Basic instruction libraries

- XJ_DataUtils, 1.0.0.6 (Xinje)
  - DataType
  - Function And FunctionBlock
    - BitLogicOperation
    - Conversion
    - Data access
    - Data Comparison
    - Data processing
    - DataMovement
    - Initialize
    - Math
    - Shift
    - String Processing

- XJ_FunctionUtils, 1.0.0.0 (Xinje)
  - DateType
  - Function And FunctionBlock
    - AreaControl
    - Counter
    - DateTime
    - FilteringAlgorithm
    - Images
    - SD Memory Card
    - TCP
    - Timer
    - UDP
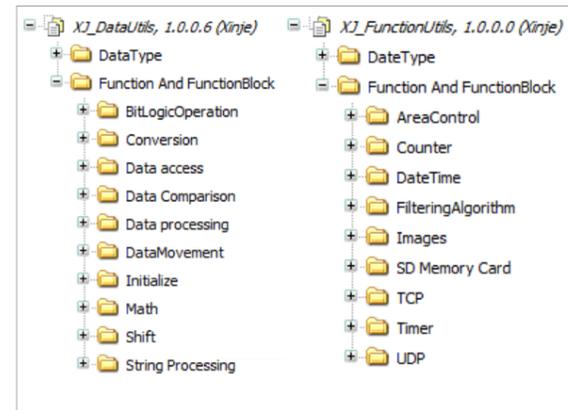
High-speed counting & motion control libraries

- XJ_HSIO, 1.2.1.0 (Xinje)
  - DataType
  - Encoder
    - FunctionBlock
      - XJ_Counter_Compare
      - XJ_Counter_CompareArra
      - XJ_Counter_Enable
      - XJ_Counter_PresetValue
      - XJ_Counter_Reset
      - XJ_Counter_Sample
      - XJ_Counter_SetRing
      - XJ_EnableInterrupt
      - XJ_MeasurePulseWidth
      - XJ_ResetCmpOutput
      - XJ_TouchProbe
      - XJ_WriteInterruptParame
  - Pulse
    - Function Block
      - XJ_PULSE_AXIS

- XJ_MotionControl, 1.1.0.8 (Xinje)
  - DataTypes
  - POUs
    - Adjust
      - XMC_FERRCOMP
    - Cam
      - XMC_CAMCLUTCHOFF
      - XMC_CAMCLUTCHON
      - XMC_CAMIN
      - XMC_CAMPHASE
    - XMC_AxisErrorDiagnosis
    - XMC_EtherCATReset
    - XMC_HomeWithParameter
    - XMC_ImmediateStop
    - XMC_MoveFeed
    - XMC_SetTorqueLimit

| Upgrade tool

Supports five functions: PLC firmware upgrade, module firmware upgrade, user program management, backup/restore, and factory reset.

02
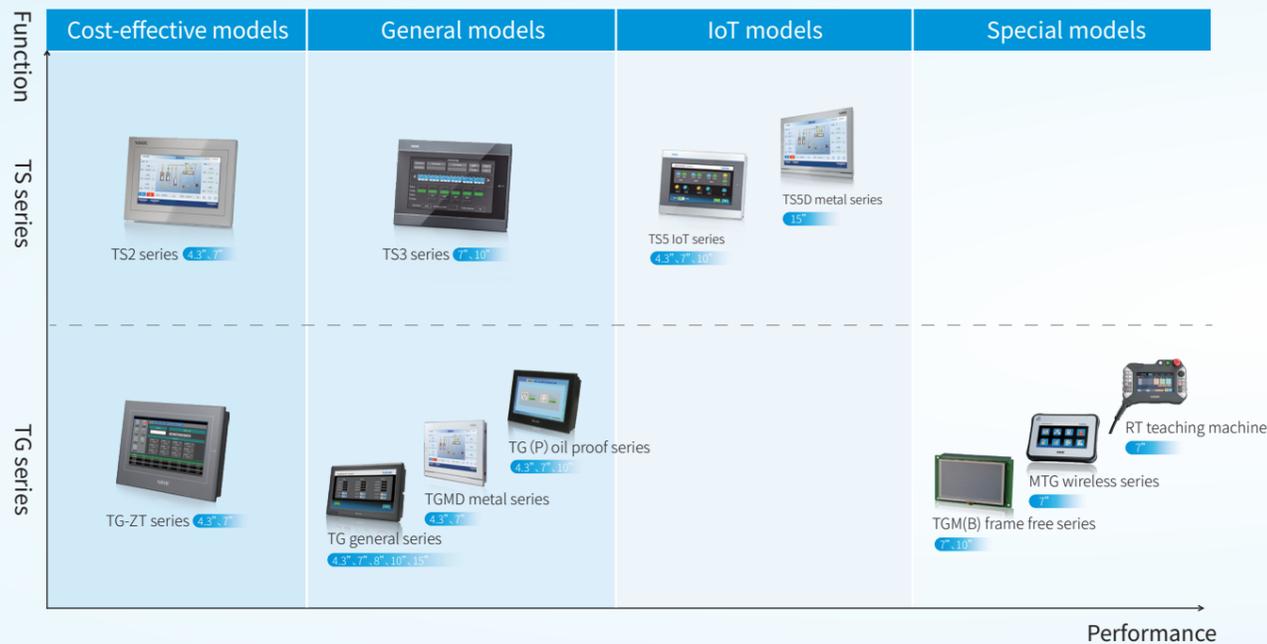# HMI
TS | TG | MTG | RT

PLC
HMI
Industrial informatization
Servo system
Frequency system
Stepping system
Vision system
IOT industrial controller

HMI model distribution

The Xinje HMI mainly includes two major series, TS and TG. The TS series is a new generation of HMI, which based on Linux system and equipped with an efficient A7 dual core processor, make touch screen operations more efficient and fast, which is beneficial for users to process data on the touch screen. Simultaneously retaining the original features of high protection and low failure rate, it has a wider range of applications. Current TS series include 4.3 inches, 7 inches, 10 inches, and 15.6 inches.more sizes are under development. Stay tuned.

The TG series general models cover sizes from 4.3 inches to 15.6 inches, with 8 sub-series that maintain consistent high protection and low failure rates. They are suitable for various occasions, as well as in trusses, robots, logistics and other industry projects.

Function

Cost-effective models	General models	IoT models	Special models

TS series

TS2 series 4.3″、7″

TS3 series 7″、10″

TS5 IoT series 4.3″、7″、10″

TS5D metal series 15″

TG series

TG-ZT series 4.3″、7″

TG general series 4.3″、7″、8″、10″、15″

TGMD metal series 4.3″、7″

TG (P) oil proof series 4.3″、7″、10″

TGM(B) frame free series 7″、10″

MTG wireless series 7″

RT teaching machine 7″

Performance

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TS series *high performance HMI*

Adopting Linux system and equipped with efficient dual core A7 processor, the human-machine experience is smoother

TS5D series - Metal IoT HMI
• Market with high structural requirements for IoT demand

TS5 series - IoT HMI
• Targeting the IoT market

TS3 series - Standard HMI
• Targeting the general automation market

TS2 series - Entry-level HMI
• Targeting the small single machine and electrical market

■ High performance processors
Adopting ARM Cortex-A7 dual core processor, 1GHz main frequency, built-in 128MB memory, expandable USB storage.
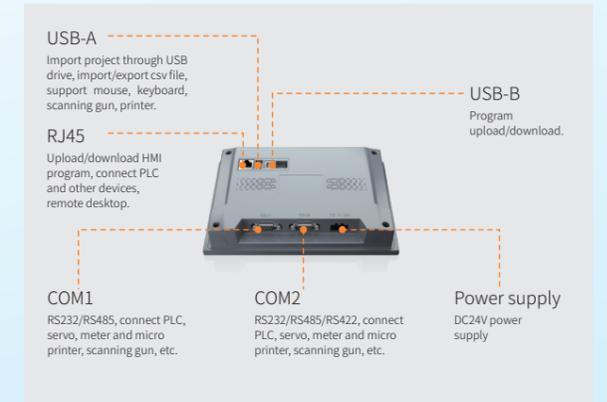
■ Multi-directional installation at will
Support free installation in four directions, meeting the needs of different occasions.

Horizontal - Normal display   Horizontal - Rotate 180°

Vertical - Rotate 90° clockwise   Vertical - Rotate 90° counterclockwise

■ Efficient system
Based on the Linux system, the multitasking mechanism significantly improves system response speed, making operations more efficient and efficient.

■ Rich device connectivity

USB-A
Import project through USB drive, import/export csv file, support mouse, keyboard, scanning gun, printer.

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

USB-B
Program upload/download.

COM1
RS232/RS485, connect PLC, servo, meter and micro printer, scanning gun, etc.

COM2
RS232/RS485/RS422, connect PLC, servo, meter and micro printer, scanning gun, etc.

Power supply
DC24V power supply

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IoT type metal HMI

TS5D series   12", 15.6"

- Adopting Cortex-A7 dual core processor, with a main frequency of 1.2GHz
- Covering mainstream information exchange protocols, supporting MQTT and TCP/IP
- The metal structure of the entire machine enhances anti-interference and heat dissipation
- Support streaming media and video playback, with better performance when used in conjunction with audio
- Support network cameras for remote monitoring
- Relying on TouchWinPro software, it is easy to use and run efficiently

| Product specification

Item		TS5D-1200-E2	TS5D-1200-4G	TS5D-1200-W	TS5D-1500-E2	TS5D-1500-4G	TS5D-1500-W
Product feature	Size	15.6"					
	Type	16.77 million colors					
	Resolution	1920*1080					
	Brightness	250 cd/㎡					
	Touch panel	Four-wire resistive touch panel					
	Service life	Over 30000 hours, ambient temperature of 25°C, 24-hour operation					
	Processor	Cortex-A7 1.2GHz					
	Storage	256MB					
	Adaptive software	TouchwinPro software					
Interface	COM1	RS232/RS485					
	COM2	RS232/RS485/RS422					
	Ethernet port	Standard RJ45, 10/100M*2					
	USB port1	USB-A (compliant with USB2.0 specifications), 2 USB flash drive ports					
	USB port2	Type-C, USB download port					
	Audio	∅3.5coaxial audio interface					
	4G	/	4G LTE-FDD (Mbps) 10 (downlink) / 5 (uplink)	/	/	4G LTE-FDD (Mbps) 10 (downlink) / 5 (uplink)	/
	WiFi	/	/	IEEE 802.11 a/b/g/n IEEE 802.11 g：54Mbps	/		IEEE 802.11 a/b/g/n IEEE 802.11 g：54Mbps
Electrical feature	Input voltage	DC24V (voltage range: DC22V-DC26V)					
	Power	10W					
	Allowable instant power failure	Below 10ms (actual power loss less than 1s)					
	Withstand voltage	AC1000V, 10mA, less than 1 minute (signal to ground)					
	Insulation impedance	DC500V, above 10MΩ (signal to ground)					
Environment	Operation temperature	0-50°C					
	Storage temperature	-10-60°C					
	Environmental humidity	10%RH-90%RH (without condensation)					
	Vibration resistance	10-25Hz (2G in X, Y, and Z directions for 30 minutes each)					
	Anti-interference	Voltage noise: 1500Vp-p, pulse width lus, 1 minute					
	Surrounding air	Non corrosive gas					
	Protection level	Front panel Ip65					
Structure	Cooling method	Natural air cooling					
	External dimension (mm)	396.0*259.0*39.0					
	Opening size (mm))	384.0*247.0 (±0.5)					

| Dimension (unit: mm)

TS5D-1200 series
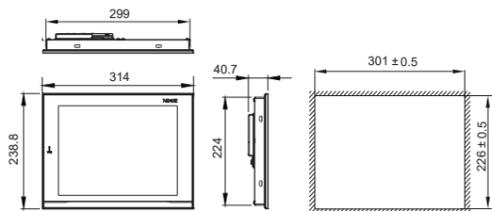
TS5D-1500 series
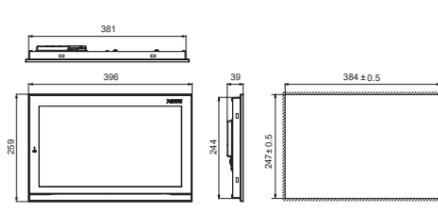
IoT type HMI

TS5 series   10.1" 7" 4.3"

- Remote functions: remote desktop (remote control of HMI real-time screen on PC), remote transparent transmission (remote upload/download PLC program), remote download (updating HMI program)
- Support audio output and can output various types of audio through external speakers
- Covering mainstream information exchange protocols and supporting MQTT/TCP IP
- Standard network port, networking through optional WIFI/4G module
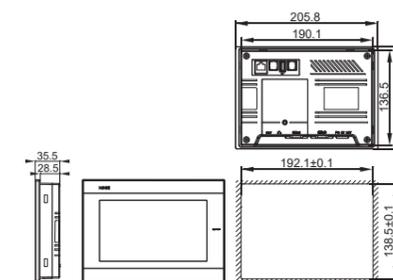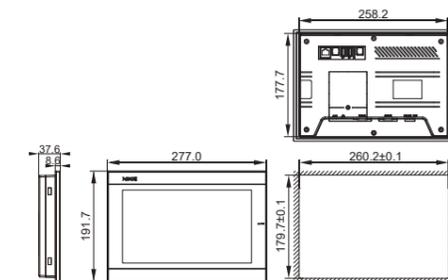- Edge computing, conducive to data analysis and statistics

| Product specification

Product model		TS5-700-E TS5-700-4G TS5-700-W	TS5-1000-E TS5-1000-4G TS5-1000-W
Product features	Size	7"	10.1"
	Type	16.77 million colors	
	Resolution	800*480	1024*600
	Brightness	300 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	
	Audio	ø3.5Coaxial audio plug	
	4G (only supported by 4G models)	4G LTE-FDD (Mbps): 10 (downlink)/5 (uplink)	
	WiFi (only supported by W models)	IEEE 802.11 a/b/g/n IEEE 802.11g: 54Mbps	
Electrical features	Input voltage	DC24V (voltage range: DC22~DC26V)	
	Current consumption	200mA	270mA
	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)	
	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	Display area (mm)	154.08*85.92	219.6*131.76
	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)
Authentication		CE marked	

| Dimension (unit: mm)

TS5-700-E/4G/W

TS5-1000-E/4G/W

PLC
HMI
Industrial informatization
Servo system
Frequency system
Stepping system
Vision system
IOT Industrial controller

Standard type HMI

TS3 series [10.1" 7"]

- Adopting Cortex-A7 dual core processor, with a main frequency of 1GHz and built-in 128MB memory
- Rich in functions, suitable for various occasions
- Stronger sealing performance, providing better protection against dust, water vapor, and debris
- The product structure conforms to lightweight design, making it lighter and thinner
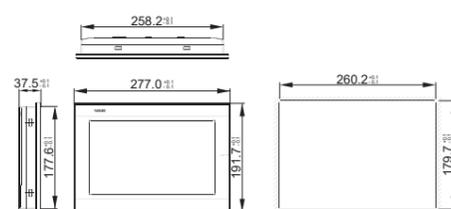- New TouchWinPro software with comprehensive feature upgrades

| Product specification

	Product models	TS3-700-E	TS3-700-M	TS3-700-M3	TS3-700-E	TS3-700-Z	TS3-1000-M	TS3-1000-E	TS3-1000-Z
Product feature	Size	7.0"					10.1"		
	Resolution	1024*600	800*480				1024*600		
	LCD	TFT LCD display with LED backlight							
	Display color	16.77 million colors							
	Brightness	200 cd/m²	300 cd/m²				350 cd/m²		300 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	512MB	128MB						
Interface	COM1	RS232/RS485				RS232	RS232/RS485		RS232
	COM2	RS232/RS485/RS422				RS485	RS232/RS485/RS422		RS485
	COM3	/	/	RS485	/	/	/	/	/
	USB-A	Flash disk port, USB2.0 standard							
	USB-B	USB download port, USB2.0 standard							
	Ethernet port	Standard RJ45	/	/	Standard RJ45	/	/	Standard RJ45	/
Electrical feature	Input voltage	DC24V (voltage range: DC22V-DC26V)							
	Consumption current	200mA					270mA		
	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	DC500V, above 10MΩ							
Environment	Operation temperature	0-50°C							
	Storage temperature	-10-60°C							
	Ambient humidity	10%RH-90%RH (no condensation)							
	Anti-interference	Voltage noise: 1500Vp-p, pulse width 1us, 1 minute							
	Ambient air	No corrosive gas							
	Cooling method	Natural air cooling							
	Protection level	Front panel IP65							
Dimension	Display area (mm)	154.08*85.92					219.6*131.76		
	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)		
	Authentication	CE marked							

| Dimension (Unit: mm)

TS3-700/700H-M/E/Z
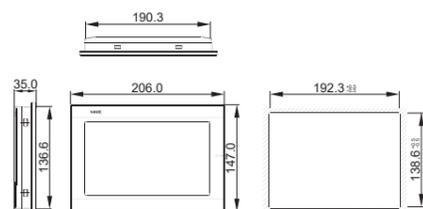
TS3-1000-M/E/Z

Economical HMI

TS2 series [4.3" 7" 10.1"]

- 7-inch screen available in Black (B) and Silver
- Based on Linux systems and relying on existing TouchWinPro software
- Adopting a mature hardware design scheme, equipped with an efficient A7 dual core 1GHz processor
- Compatible with existing product opening sizes, stable, durable, efficient, and convenient
- The front panel meets the IP65 protection level and supports free installation in four directions, meeting the requirements of different occasions
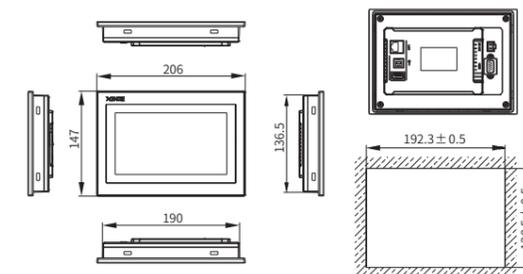
| Product specification

	Product models	TS2-700-Z	TS2-700-Z-B	TS2-700-E	TS2-700-E-B	TS2-700H-E	TS2-700H-Z	TS2-700-W	TS2-700-4G
Product feature	Size	7.0"							
	LCD	TFT LCD display with LED backlight, 16.77 million colors							
	Resolution	800*480				1024*60		800*480	
	Brightness	300 cd/m²							
	Touch panel	Four-wire resistive touch panel							
	Service life	Above 30000 hours, ambient temperature 25°C, 24 hours operation							
	Language	Multiple language options including Simplified Chinese, Traditional Chinese, English, Japanese, Russian, German, and more (Chinese characters compatible with the Windows font library).							
	Character size	Any font and size							
	Processor	Cortex-A7 1GHz							
	Memory	128MB						256MB	
	Software	TouchwinPro programming software							
Interface	COM port	RS232/RS485						RS232/RS485/422	
	Ethernet port	/				Standard RJ45		/	Standard RJ45
	USB-A	USB-A (compliant with USB2.0 specifications), USB port, used to connect portable storage devices such as USB drives, can import and export data, and can connect devices such as mouse and keyboards							
	USB-B	USB-B (compliant with USB2.0 specifications), USB download port, used for downloading HMI program data							
	4G (Only 4G models are supported)	/							4G LTE-FDD (Nbps): 10(downlink) /5(uplink)
	WIFI (Only W models are supported)	/						IEEE 802.11 b/g/n IEEE 802.11 g:54Mbps	/
Electrical feature	Input voltage	DC24V (voltage range: DC22-26V)							
	Current consumption	200mA							
	Allowable instant power failure	Below 10ms (actual power loss less than 1s)							
	Withstand voltage	AC 1000V, 10mA, less than 1minute (single to ground)							
	Insulation impedance	DC500V, above 10MΩ (single to ground)							
Environment	Power supply	DC24V (voltage range: DC22V-DC26V)							
	Operation temperature	0-50°C							
	Storage temperature	-10-60°C							
	Ambient humidity	10%RH-90%RH (no condensation)							
	Protection level	Front panel IP65							
	Anti-interference	Voltage noise: 1500Vp-p, pluse width lus, 1minute							
	Surrounding air	Non corrosive gas							
Dimension	External dimension (mm)	206*147*34.3							
	Opening size (mm)	192.3*138.6 (±0.5)							
	Authentication	CE marked							

| Dimension (Unit: mm)

TS2-700-W/4G
TS2-700H-E/Z
TS2-700-Z
TS2-700-Z-B
TS2-700-E
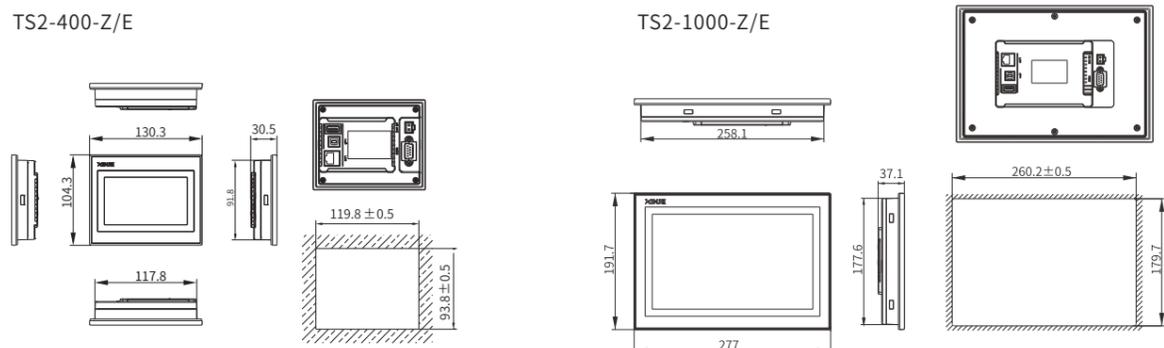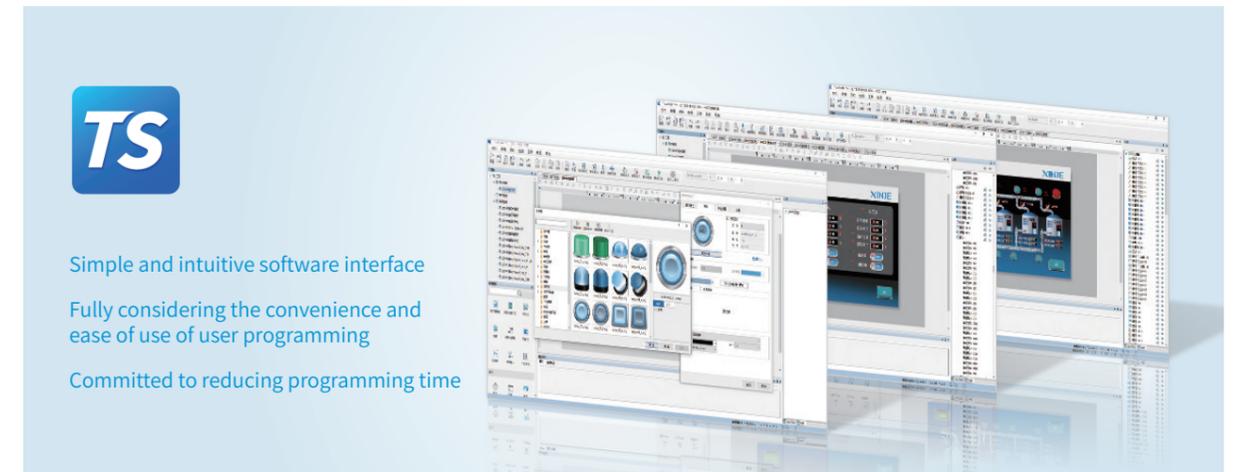TS2-700-E/B

Economical HMI

TS2 series   4.3" 7" 10.1"

- 7-inch screen available in Black (B) and Silver
- Based on Linux systems and relying on existing TouchWinPro software
- Adopting a mature hardware design scheme, equipped with an efficient A7 dual core 1GHz processor
- Compatible with existing product opening sizes, stable, durable, efficient, and convenient
- The front panel meets the IP65 protection level and supports free installation in four directions, meeting the requirements of different occasions

| Product specification

	Product models	TS2-400-Z	TS2-400-E	TS2-1000-Z	TS2-1000-E
Product feature	Size	4.3"		10.1"	
	LCD	TFT LCD display with LED backlight, 16.77 million colors			
	Resolution	480*272		1024*60	
	Brightness	500cd/m²		350 cd/m²	
	Touch panel	Four-wire resistive touch panel			
	Service life	Above 30000 hours, ambient temperature 25℃, 24 hours operation			
	Language	Multiple language options including Simplified Chinese, Traditional Chinese, English, Japanese, Russian, German, and more (Chinese characters compatible with the Windows font library).			
	Character size	Any font and size			
	Processor	Cortex-A7 1GHz			
	Memory	64MB		256MB	
	Software	TouchwinPro programming software			
Interface	COM port	RS232/RS485			
	Ethernet port	/	Standard RJ45	/	Standard RJ45
	USB-A	USB-A (compliant with USB2.0 specifications), USB port, used to connect portable storage devices such as USB drives, can import and export data, and can connect devices such as mouse and keyboards			
	USB-B	USB-B (compliant with USB2.0 specifications), USB download port, used for downloading HMI program data			
Electrical feature	Input voltage	DC24V (voltage range: DC22-26V)			
	Current consumption	200mA		270mA	
	Allowable instant power failure	Below 10ms (actual power loss less than 1s)			
	Withstand voltage	AC 1000V, 10mA, less than 1minute (single to ground)			
	Insulation impedance	DC500V, above 10MΩ (single to ground)			
Environment	Power supply	DC24V (voltage range: DC22V-DC26V)			
	Operation temperature	0-50℃			
	Storage temperature	-10-60℃			
	Ambient humidity	10%RH-90%RH (no condensation)			
	Protection level	Front panel IP65			
	Anti-interference	Voltage noise: 1500Vp-p, pluse width lus, 1minute			
	Surrounding air	Non corrosive gas			
Dimen-sion	External dimension (mm)	130.3*104.3*30.5		277*191.7*37.1	
	Opening size (mm)	119.8*93.8（±0.5）		260.2*179.7（±0.5）	
	Authentication	CE marked			

| Dimension (Unit: mm)

TS2-400-Z/E

130.3
30.5
104.3
91.8
119.8±0.5
117.8
93.8±0.5

TS2-1000-Z/E

258.1
37.1
260.2±0.5
191.7
177.6
179.7
277

TouchWin Pro software

Simple and intuitive software interface

Fully considering the convenience and ease of use of user programming

Committed to reducing programming time

■ Tag Communication

TS series products support standard tag communication such as Codesys and PLC handler, as well as proprietary tag communication like Siemens and Inovance, enabling faster and more efficient programming.
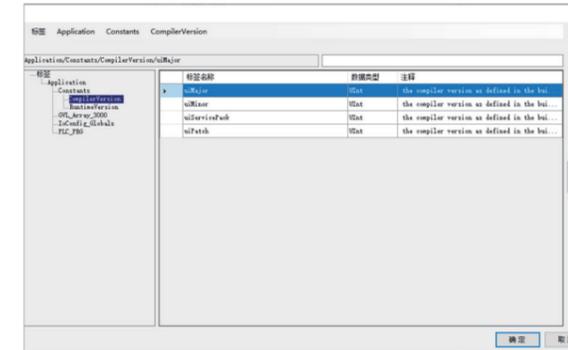
■ Multilingual Tags

Supports mainstream foreign languages (English, Korean, Japanese, Arabic, etc.), with up to 16 languages usable simultaneously. Features table editing, import/export support, and batch one-click switching for multilingual texts.
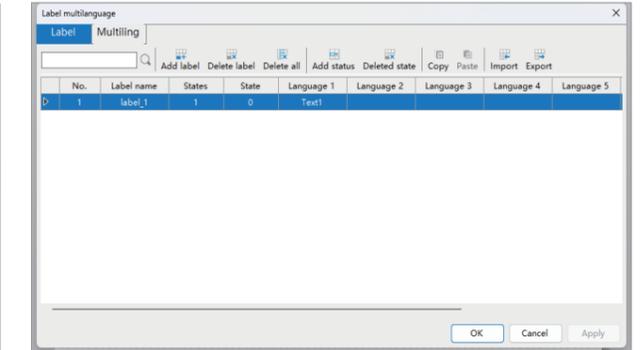
■ Powerful Recipe Management

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.
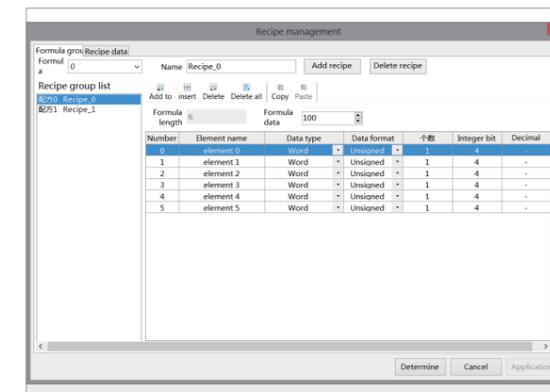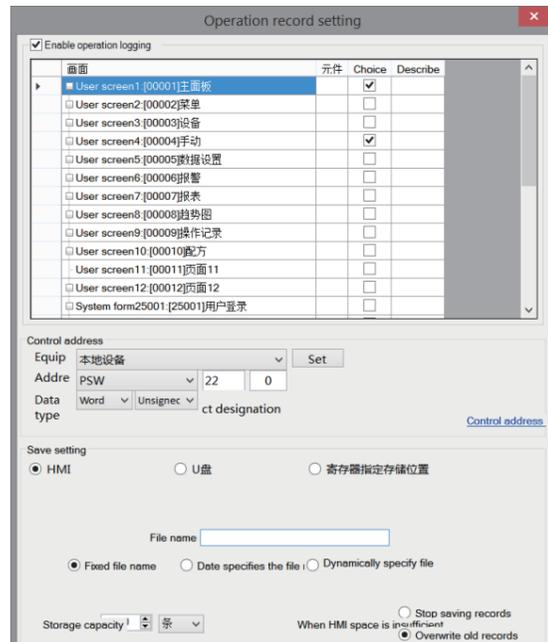
■ Detailed Report Management

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.
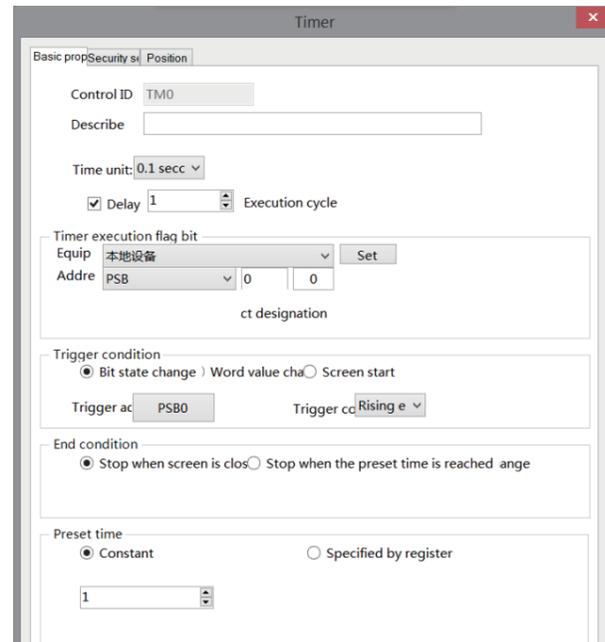
■ Traceable Operation Records

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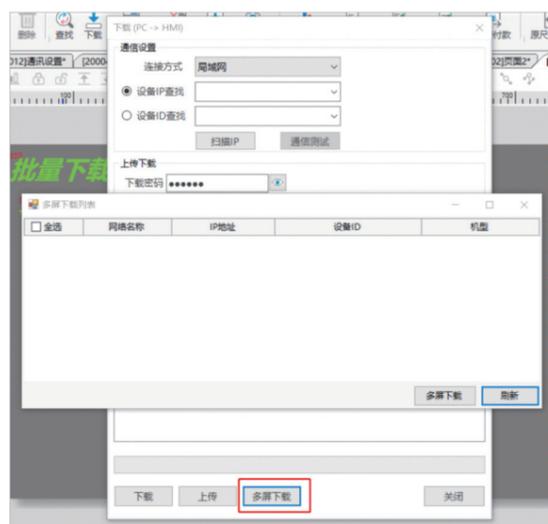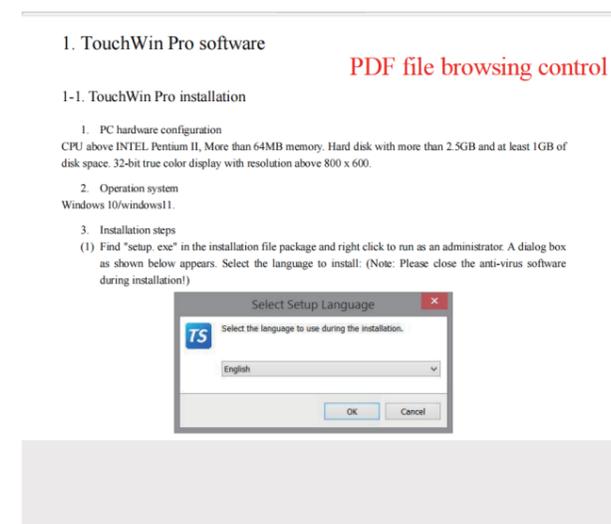

■ Multi-screen Download

Supports simultaneous project download to up to 10 touch screens within the same local area network (provided there are no devices with identical IPs in that network).

■ Schedule

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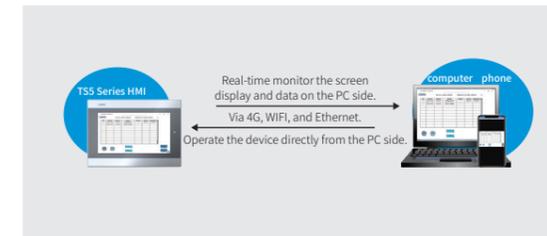

■ PDF File Preview

Combined with the file browsing function, allows direct preview and viewing of PDF files from a USB drive on the screen, with page turning and zoom operations supported.

1. TouchWin Pro software

PDF file browsing control

1-1. TouchWin Pro installation

1.   PC hardware configuration
CPU above INTEL Pentium II, More than 64MB memory. Hard disk with more than 2.5GB and at least 1GB of disk space. 32-bit true color display with resolution above 800 x 600.

2.   Operation system
Windows 10/windows11.

3.   Installation steps
(1) Find "setup. exe" in the installation file package and right click to run as an administrator. A dialog box as shown below appears. Select the language to install: (Note: Please close the anti-virus software during installation!)
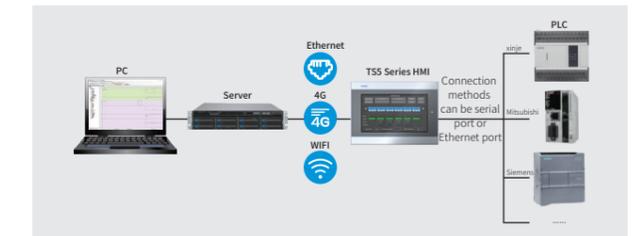

■ Remote Desktop

Also known as VNC functionality, supports synchronizing the touch screen's display and data on a PC or mobile device, enabling real-time HMI monitoring and remote control of the touch screen without being on-site.

■ Multiple Program Download Methods

Supports uploading and downloading touch screen programs via USB drive, local area network, or remotely.

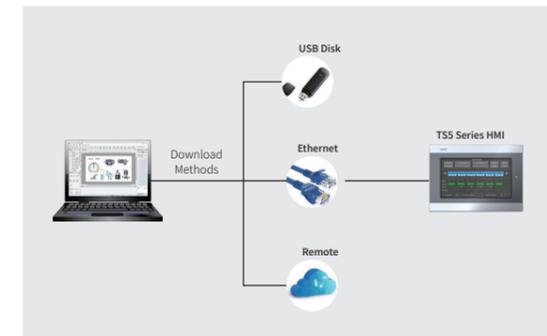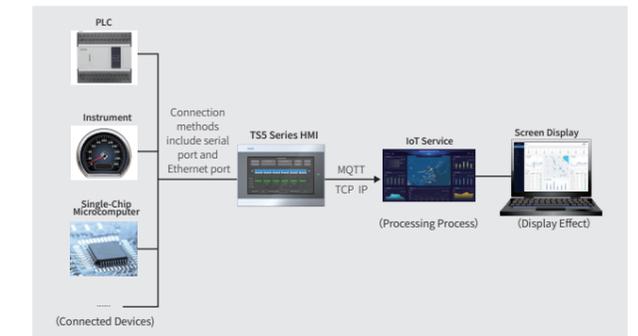Covers mainstream information interaction protocols, supporting MQTT/TCP IP.

■ Remote Passthrough

Supports remote upload and download of PLC programs, solving issues like not finding the download cable or insufficient ports. Programs can be downloaded to the PLC via network connection using 4G or WiFi modules.

■ Optional WIFI/4G Communication Expansion Board

The device comes standard with an Ethernet port and supports an optional WIFI/4G communication expansion board, which integrates seamlessly with the TS5 without occupying extra space. Users can freely switch between the 4G or WiFi communication expansion board based on the usage scenario.

■ Multimedia Function

Supports streaming media and preset video playback, with enhanced effects when used in conjunction with audio.

■ Real-time Monitoring

Supports connecting to network cameras for remote monitoring.

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
	Authentication	CE marked	

Ultrathin type HMI

TG(G) / TG(S) 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	TGA63S-MT TGA63S-UT TGA63S-ET	TG765S-MT TG765S-UT TG765S-ET
Product features	Display size	10.1″	7″	4.3″	10.1″	7″
	Resolution	1024*600	800*480	480*272	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/RS422/RS485	RS232/RS422/RS485	RS232/RS485/RS422 (XT model cannot support RS422)	RS232/RS422/RS485	
	Download port	RS232/RS485	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	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)	278.0*192.3*44.0	207.0*148.0*38.5	152.6*102.0*33.4	278.0*192.3*44.0	207.0*148.0*38.5
	Opening size (mm)	260.2*179.7	192.0*138.5	144 .0*94.0	260.2*179.7	192.0*138.5
	Authentication	CE marked				

PLC

HMI

Industrial information

Servo system

Frequency system

Stepping system

Vision system

IOT industrial controller

General HMI

TG series   `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 (GA62 support)

■ USB-A front interface design, more convenient operation   `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.

| Product specification

Product model	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	10.1″	10.1″	8″	7″	4.3″	
Resolution	1024*600	800*480	800*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					
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	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)	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)	260.2*179.7	260.2*179.7	211.4*157.8	192.0*138.5	144.0*94.0	
Authentication	CE marked					

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

| 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
Authentication	CE marked				

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
	Authentication	CE marked		

Appearance dimension drawing (Unit: mm)

TGMA63B-ET   TGM765B-MT/ET   TGM465B
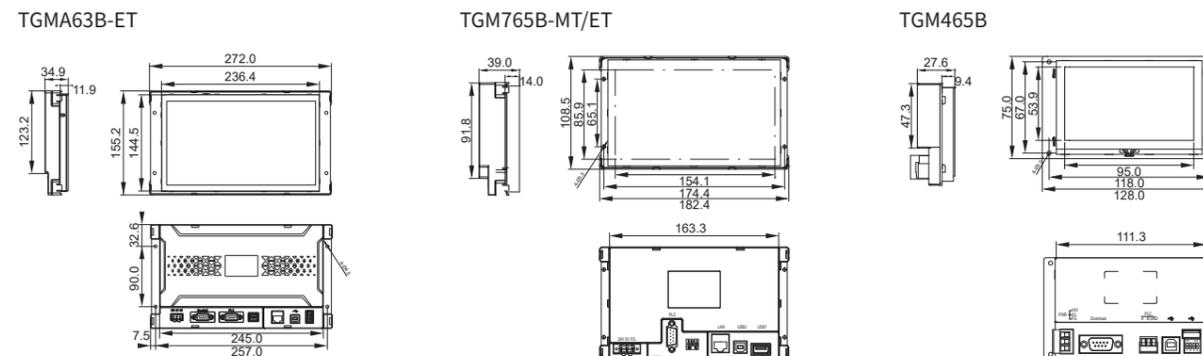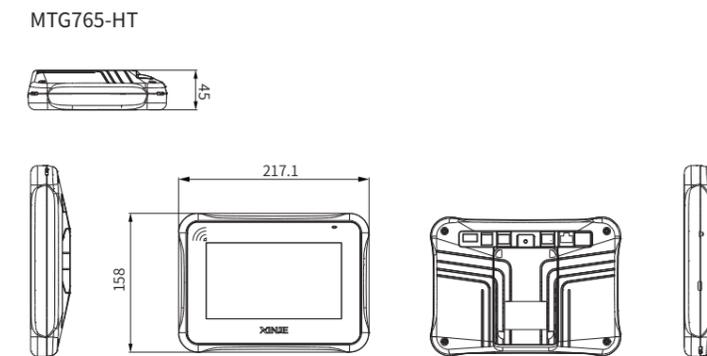

Handheld wireless HMI

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	Simplified Chinese, Traditional Chinese, English, Japanese, Russian, German, and more
	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
	Authentication	CE marked

Appearance dimension drawing (Unit: mm)

MTG765-HT

PLC
HMI
Industrial information
Servo system
Frequency system
Stepping system
Vision system
IOT industrial controller

Handheld teaching pendant

RT series 7"

- Convenient field equipment test, widely used in manufacturing and industrial robot industry
- 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		RT711	RT712	RT720	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			
	Housing Material	Engineering Plastic PC+ABS			
	External dimension (mm)	161.8*245.1*26.5	174.2*236.5*38.8	163.0*245.0*60.1	191.7*270.0*85.9
	Authentication	CE marked			

| Appearance dimension drawing (Unit: mm)

RT711

RT712
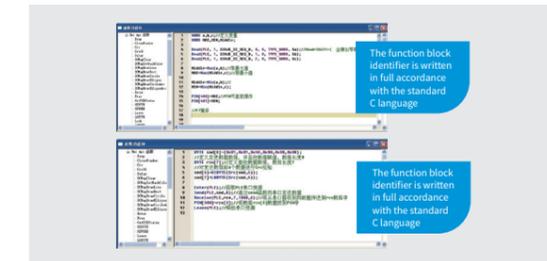
RT760

RT720
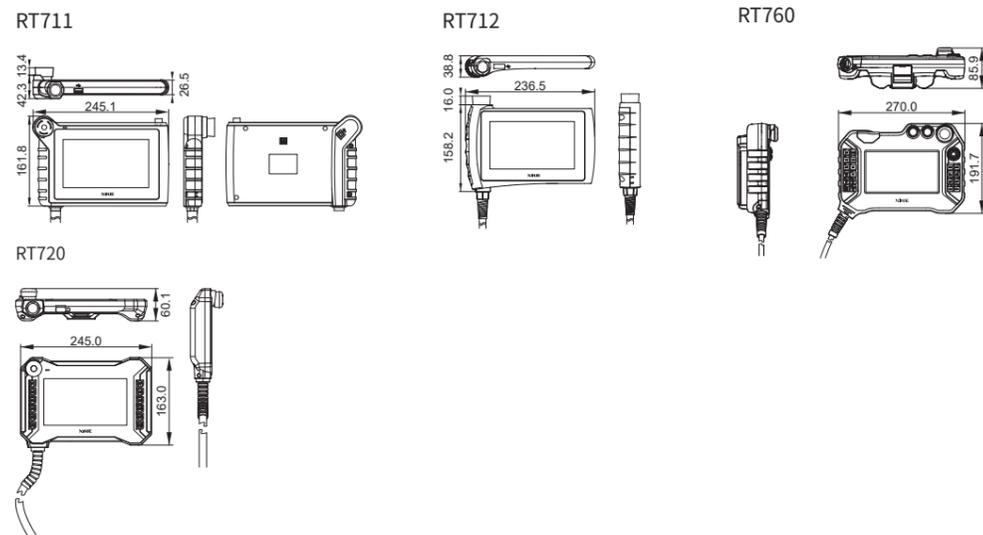
TouchWin

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.

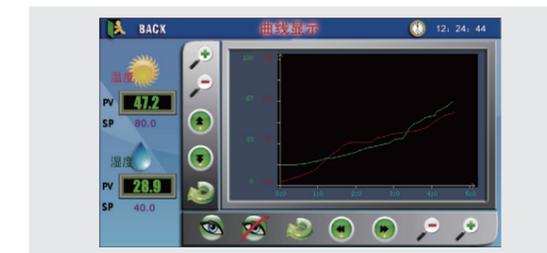■ Support most standard C functions

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

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

Strong data processing capability

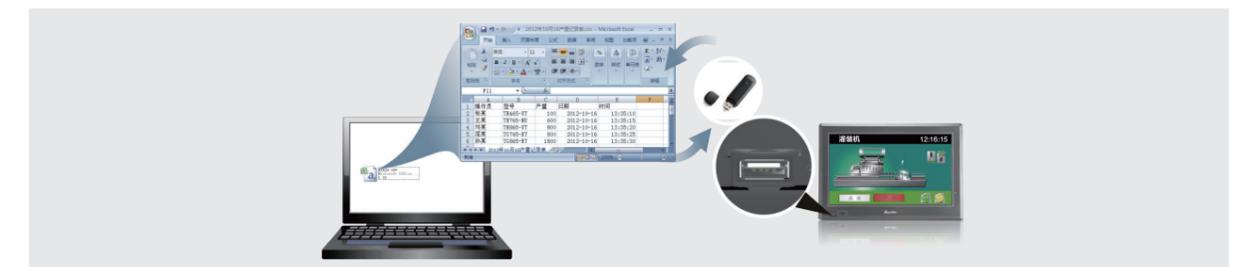■ Process control data acquisition function, and the trend chart display is more intuitive

■ 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
Industrial information
Servo system
Frequency system
Stepping system
Vision system
IOT industrial controller

◼ FTP File Transfer

Enables file transfer between the touch screen and a PC, allowing access to sampled data, alarm logs, and operation logs from within the touch screen. User permissions and recipe data can be modified via the FTP file replacement method.
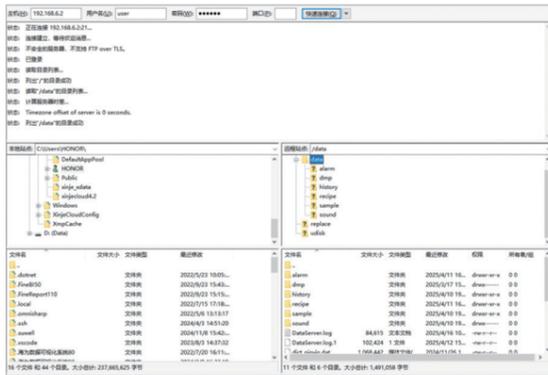

◼ Flexible Alarm Configuration

Features a new alarm function supporting configurable flashing of alarm text and customizable background colors for alarm bars by priority level. Alarm data sorting and querying methods are more diverse.
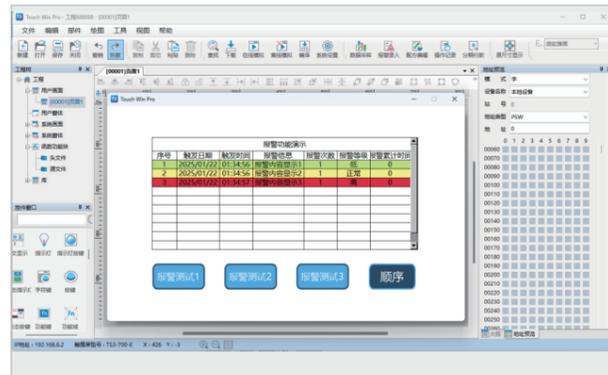
◼ Batch Copy, Edit, Conversion

Supports batch copying and editing of components, as well as batch address conversion. Dramatically improves efficiency—the more components, the greater time saved.
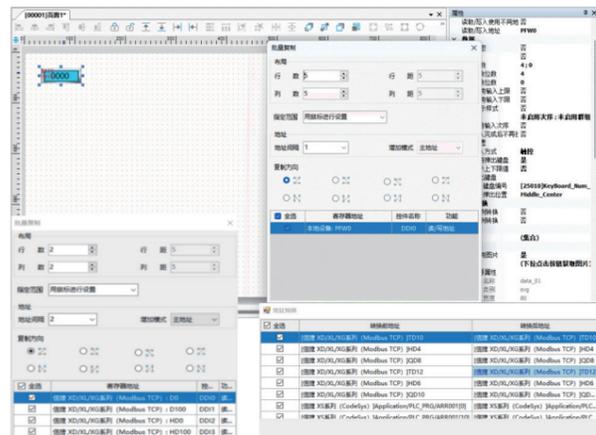
TG series general HMI

4.3-10.1inches full coverage, 8 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

◼ Suitable for basic occasions

- TG(S/G)-XT Cost effective

◼ Suitable for harsh environment

- TGM(D) Site environment with severe temperature requirements

◼ 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	Start	Run
USB high-speed data transmission can greatly reduce the program download time and facilitate debugging	Greatly improve the startup speed and reduce the waiting time	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.

PLC
HMI
Industrial informatization
Servo system
Frequency system
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Vision system
IOT industrial controller