

Human-machine Interface

Product Catalog



orporate Profile







Kinco Automation (Shanghai) Ltd. and its subsidiary, Kinco Electric (Shenzhen) Ltd., are private high-tech enterprises specialized in the research, development, and production of automation products. Kinco controls such companies as JAT Kinco Electric Shenzhen Ltd., and Kinavo Servo Motor (Changzhou) Ltd., and owns two well-known brands, eView and Kinco. Kinco has established full line of automation products such as industrial human-machine interfaces, AC servo systems, stepper systems, PLC and industrial fieldbus products with proprietary intellectual property rights. Kinco has become a leading supplier of machine automation solutions in China.

Undertaking the mission of "Providing automation solutions to global customers", Kinco focuses on the development of automation technology since its founding. Now Kinco has acquired technology and knowledge for control, drive, human-machine interface and system integration. By adopting international standards and following the trends in automation industry, we developed PLC products compatible with IEC-61131-3 standard, intellectual AC servo drives, leading HMI products in China and fieldbus products. Kinco is capable of making customized products/solutions/services fit the customer's needs best based on our technology platform.

Kinco has established R&D centers in Shenzhen, Shanghai, Beijing, Changzhou and Germany. We implement total quality management measures complying with ISO9001 standard throughout the marketing, R&D, production, and sales processes. We support our customers at home with a branch and distributor system covering mainland China. We appoint reliable partners to be distributors in overseas markets. Kinco is a customer-oriented company, always listening to customers' needs, cooperating with market leaders in emerging industries, providing firstrate automation solutions. Kinco products are widely used in industries such as textile machines, packaging machines, transportation systems and others. Kinco HMI is the No.1 domestic brands in China market. Kinco brand and products have been awarded by renowned media and organizations within the automation

Sticking to the business philosophy of "Caring people, pursuing excellence" and the value of "customer intimacy", Kinco advocates the corporate spirit of performance-oriented innovation, cooperation and efficiency. With the vision of "Automation creates wonderful life" in our minds, Kinco is always trying its best to be the partner of your every success and creates values for you.





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System Description

MT6000 is a brand new series of touch panel HMI (Human Machine Interface) for industrial automation applications and other applications such as building automation and home appliance control. Thanks to the powerful PXA270 CPU and user-friendly Windows CE operation system, MT6000 can bring you performance and flexibility.

Kinco has established partnership with several major software suppliers. Mutual benchmark tests ensure that their WinCE software products are fully compatible with the MT6000 hardware. Users of those software products can easily immigrate from other hardware platform to MT6000 with few projects modifications, in this way they can save their investments and reuse their experiences. Theoretically any software designed for Windows CE and XScale processor could run on MT6000.

The user can also develop their application programs with Microsoft Visual Studio development tool. We provide software development kit (SDK), necessary documents and technical support to help the users complete the software development.

With our 6-year experience in developing and manufacturing HMI touch panels in industrial automation fields, we clearly know what our customers need and the contemporary trend in automation world. MT6000 differences from many other competitors' products on communication interfaces. Besides the conventional serial ports, USB Host/Client ports and Ethernet port, MT6000 provides industrial standard CAN interface. A system expansion port is reserved on the board, which means adding other fieldbus or real-time Ethernet interfaces is very easy. Kinco will provide more fieldbus/RT Ethernet interface expansion options upon the requirement of our customers.

MT6000 Series Features

- XScale® PXA270 32-bit RISC CPU;
- Windows® CE 5.0 OS pre-installed;
- TFT LCD, screen size 5.7",8" and 10.4";
- Major HMI/SCADA and soft PLC software ready;
- SDK for developing proprietary application;
- Serial, Ethernet and CAN port;
- SD card slot for mass storage;
- Flexible expansion board.



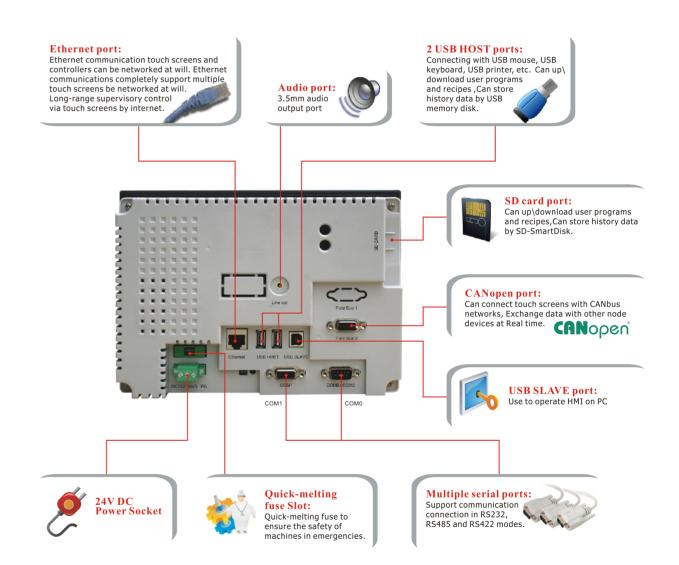
Hardware Description

Standard Configuration:

Three RS-232/485/422 ports Two USB-HOST ports One USB SLAVE port One Ethernet Interface One Audio Output Interface One SD Card

Expandable Configuration:

CANopen Communication Card



Application Description

HMI/SCADA Terminal

HMI/SCADA software plays a critical role in today's factory management. MT6000 is a cost-effective choice for on-site HMI terminal. Ethernet interface ensure the easy connection into factory-level network and the smooth flow of data stream from the bottom to the top. SD card slot and USB port make the storage and transfer your invaluable data just a piece of cake. The TFT LCD display can show images of 65536 colors at VGA resolution. There are many HMI/SCADA software products in the market. Any software which can be used on a WinCE/ARMV4 platform is OK for MT6000.

Panel PLC

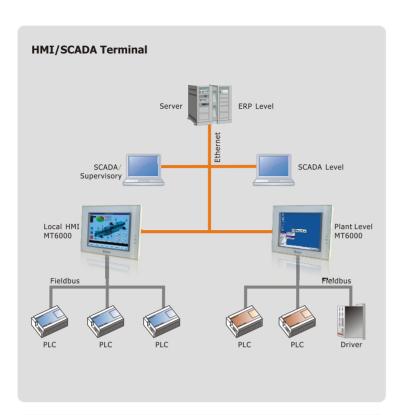
Software-based logic controller is another hot topic in today's automation industry. With the powerful RISC processor, MT6000 can execute logic control task in a high-speed. Being a controller-HMI all-in-one integrated solution, the user could save cost and cabin space for mounting. We have cooperated with 3S, one of the leaders in soft-PLC market and made a customized version of CoDeSys runtime.

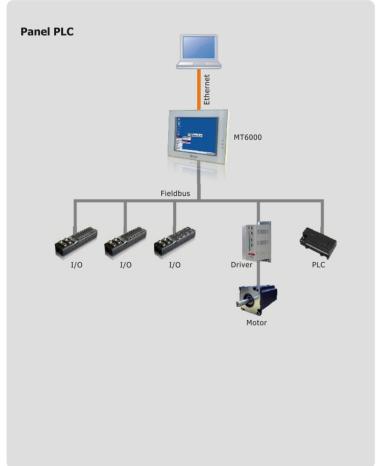


Besides the serial ports and Ethernet, we provide a CANopen interface which can be configured within the CoDeSys CoDeSys programming environment.

Other application

For users who want to develop their specific application, MT6000 can be used as a generalpurpose embedded hardware platform. We provide the SDK tools and technical documents and telephone support to help the users complete their developments. The boundary of application is just limited by your imagination!





MT6000 Series

Technical Specifications

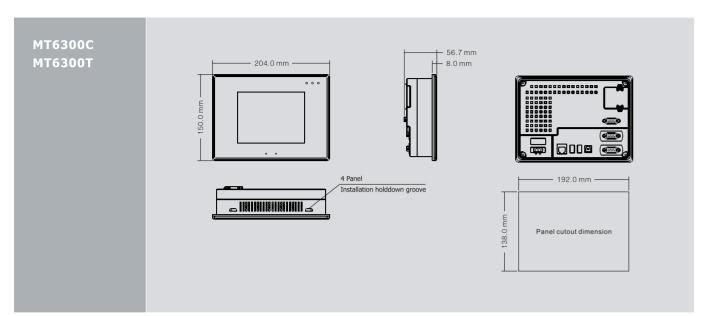


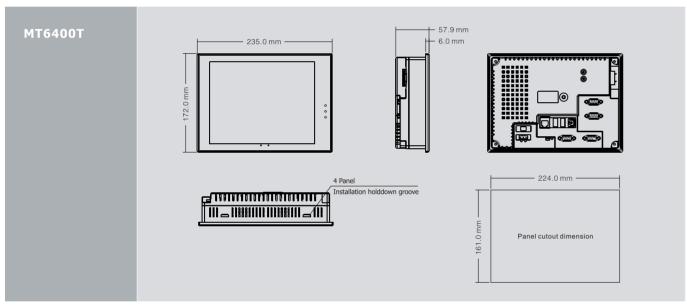


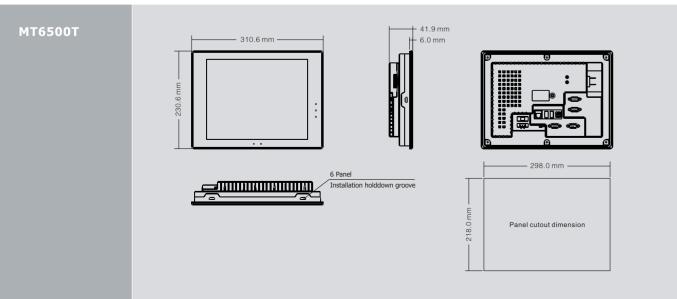


Model	MT6300C	MT6300T	MT6400T	MT6500T	
Performance specification					
Display	5.6" TFT	5.7" TFT	8" TFT	10.4" TFT	
Resolution	320×234 pixels	320×240 pixels	640×48	80 pixels	
Color		65536	colors		
Backlight	LED	100	CFL	2CCFL	
Brightness	300cd/m ²	500cd/m ²	350cd/m ²	400cd/m ²	
Backlight life	50000 hr.				
Touch Panel		4-wire precision r	esistance network		
Processor	32-bit RISC CPU 520MHz				
Memory		32M FLASH,	64M SDRAM		
Recipe memory & RTC		512KB	& RTC		
Expandable memory		SD Card,	USB Stick		
Printer port	Cor	nect a printer with a U	SB port via USB HOST	port.	
Ethernet		10/100	Base-T		
Audio interface	None 1 Audio output interface				
Program download		1 USB SLAVE po	ort,Ethernet port		
COM port	COM1:RS232/RS485-2/RS485-4, COM2:RS232/RS485-2/RS485-4				
Video interface	None				
USB Host	2 USB host ports for keyboard, mouse, printer, and etc.				
Communication module extending	CANopen interface expansion board				
Electrical specification					
Rated power	7.	2W	10.8 W	12 W	
Rated voltage		DC	24V		
Input range		DC21~	DC28V		
Power down allowed		<5	ims		
Insulation resistance		Greater than 50	MΩ@ 500V DC		
Dielectric strength test		500V AC	1 minute		
Structure specification					
Shell color		Light	-gray		
Shell material		Al	BS		
Dimensions(mm)	204×1	50×56.7	235×172×57.9	310.6×230.6×55	
Cutout size(mm)	1923	×138	224×161	298×218	
Weight	0.9	6kg	1.27kg	2kg	
Environment specification					
Operating temperature	0~45℃	-10~70℃	0~	45 ℃	
Operating humidity		10~90% nor	n-condensing		
Storage temperature	-10~60℃	-30~80℃	-10^	-60°C	
Storage humidity		10~90% nor	n-condensing		
Shockproof test			ction, 2G, 30 minutes)		
Cooling method			ir cooling		
Certification					
Degree of protection		IP65 (fro	nt panel)		
CE certification	Comply w	ith EN61000-6-2:2005		7standards	
FCC compatibility			h FCC Class A		

Dimensions (Unit:mm)

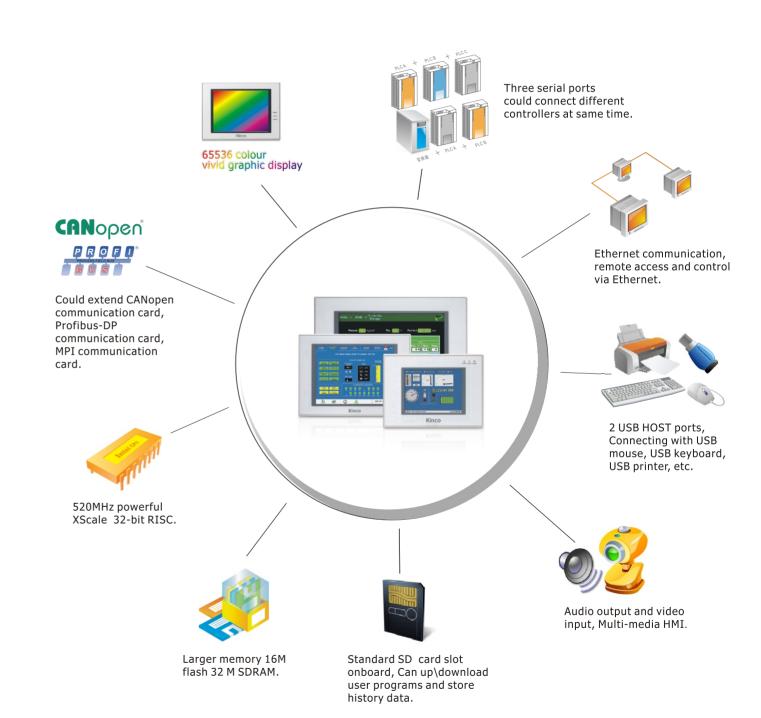






System Description

MT5000 series HMI use INTEL 520MHz RISC CPU and LINUX operating system, have the easy learning configuration software, maintain the classic HMI design. It supports USB HOST function and SD card, and could manage data and preserve parameters online, you can quickly up/download user programs, and integrate the audio output; MT5000 series HMI integrate industry Ethernet and Fieldbus interface, could be linked with other screens in eView protocol, could communicate with other controllers via Ethernet interface in MODBUS TCP/IP protocol, could exchange data with controller via OPC software, could extend CANopen communication card and Profibus-DP communication card, connecting to the field bus network.



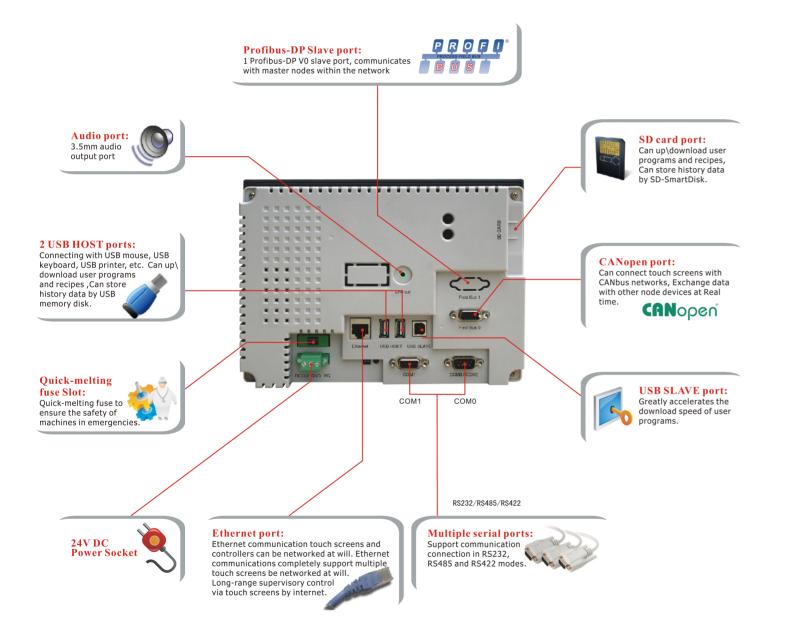
Hardware Description

Standard Configuration:

Three RS-232/485/422 ports Two USB-HOST ports One USB SLAVE port One Ethernet Interface One Audio Output Interface Two Video input interface One SD Card

Expandable Configuration:

Profibus-DP Communication Card **CANopen Communication Card MPI Communication Card**





MT5000 Series Features

- ▶ Higher performance and efficiency thanks to the 520MHz powerful XScale® 32-bit RISC
- Larger and expansible memory for more complicated user application and data storage;
- Dual USB host ports compatible with peripherals like mouse, keyboard, printer and USB disk. Users can upload/download application and recipes data from/to the panel by using USB disk. Historical data can also be stored in the USB disk:
- Standard SD® card slot onboard Just like the USB disk, SD[®] card can be used for uploading/downloading application and recipes data from/to the panel. Also, historical data can be stored in the card;
- 3.5mm audio output port for external speaker;
- > Some models support two-channel video input interface, they can be used real-time monitoring on industrial fields;
- > RJ45 Ethernet interface through which the panel can communicate with controllers and other panels, users can remotely get access to the panel via the internet also;
- > Optional CANopen interface makes it possible for using the panel as a CAN node. With proper drivers, the panel can be used as a host or client. With MT5020, you CAN;
- > The panel can exchange data with Profibus-DP node with the optional Profibus interface;
- With optional MPI interface, the panel can communicate with Siemens S7-300/400 without any costly adapters;
- 1 USB slave port for downloading application data from the PC faster than via serial port;
- 65536 color TFT LCD ensures vivid graphic display.

Technical Specifications



Model	MT5320C	MT5320C-DP	MT5320C-CAN	MT5320C-MPI	
Performance specification					
Display		5.6	'TFT		
Resolution		320×234 pixels			
Color		65536 colors			
Backlight		L	ED		
Brightness		300cd/m ²			
Backlight life		50000 hr.			
Touch Panel		4-wire precision	esistance network		
Processor		32-bit RISC	CPU 520MHz		
Memory		8M FLASH,	16M SDRAM		
Recipe memory & RTC		512KE	3 & RTC		
Expandable memory		1 SD Card,	2 USB HOST		
Printer port		USB/Se	erial port		
Ethernet		10/100) Base-T		
Audio interface			one		
Vedio interface		N	one		
Program download		1 USB SLAVE port/Serial port/Ethernet port			
COM port	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS232				
Expansion port	None	Profibus-DP	CANopen	MPI	
Electrical specification			·		
Rated power	7.2 W				
Rated voltage		DC	24V		
Input range		21~7	28VDC		
Momentary power-off		<.	Bms		
Insulation resistance		Greater than 5	0M Ω @ 500V DC		
Dielectric strength test		500V AC	1 minute		
Structure specification					
Shell color		Ligh	t-gray		
Shell material		А	BS		
Dimensions(mm)		204×1	50×56.7		
Cutout size(mm)		192	×138		
Weight		0.9	96kg		
Environment specification					
Operating temperature		-10	√70 ℃		
Operating humidity		10~90% no	n-condensing		
Storage temperature		-30,	-80℃		
Storage humidity		10~90% no	n-condensing		
Shockproof test			ection, 2G, 30 minutes)		
Cooling method			air cooling		
Certification					
Degree of protection		IP65 (fro	ont panel)		
CE certification	Comply	with EN61000-6-2:2005	and EN61000-6-4:2007	standards	
FCC compatibility			th FCC Class A		

MT5000 Series

Technical Specifications



Model	MT5320T	MT5320T-DP	MT5320T-CAN	MT5320T-MPI	
Performance specification					
Display		5.7'	'TFT		
Resolution		320×2	40 pixels		
Color		65536	colors		
Backlight		10	CFL		
Brightness		500	cd/m²		
Backlight life		500	00 hr.		
Touch Panel		4-wire precision resistance network			
Processor		32-bit RISC	CPU 520MHz		
Memory		8M FLASH,	16M SDRAM		
Recipe memory & RTC		512KE	3 & RTC		
Expandable memory		1 SD Card,	2 USB HOST		
Printer port		USB/Se	erial port		
Ethernet		10/100) Base-T		
Audio interface		N	one		
Vedio interface	None				
Program download		1 USB SLAVE port/Serial port/Ethernet port			
COM port	COM0:RS232/R	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS			
Expansion port	None	Profibus-DP	CANopen	MPI	
Electrical specification					
Rated power	7.2 W				
Rated voltage		DC24V			
Input range		21~7	28VDC		
Momentary power-off		<.	3ms		
Insulation resistance		Greater than 5	0M Ω @ 500V DC		
Dielectric strength test		500V AC	1 minute		
Structure specification					
Shell color		Ligh	t-gray		
Shell material		А	BS		
Dimensions(mm)		204×1	50×56.7		
Cutout size(mm)		192	×138		
Weight		0.9	96kg		
Environment specification					
Operating temperature		-10	√70 ℃		
Operating humidity		10~90% no	n-condensing		
Storage temperature			~80℃		
Storage humidity		10~90% non-condensing			
Shockproof test		10~25Hz (X, Y, Z direction, 2G, 30 minutes)			
Cooling method		Natural a	air cooling		
Certification					
Degree of protection		IP65 (fro	ont panel)		
CE certification	Comply	with EN61000-6-2:2005	and EN61000-6-4:2007	standards	
FCC compatibility			th FCC Class A		

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Technical Specifications



Model	MT5420T	MT5420T-DP	MT5420T-CAN	MT5420T-MP	
Performance specification					
Display		8''	TFT		
Resolution		640×4	80 pixels		
Color		65536			
Backlight		1CCFL			
Brightness		350	cd/m²		
Backlight life		500	00 hr.		
Touch Panel		4-wire precision	resistance network		
Processor		32-bit RISC	CPU 520MHz		
Memory		16M FLASH	, 32M SDRAM		
Recipe memory & RTC		512K	B & RTC		
Expandable memory		1 SD Card,	2 USB HOST		
Printer port			erial port		
Ethernet		10/10	0 Base-T		
Audio interface		1 Audio ou	tput interface		
Vedio interface			one		
Program download		1 USB SLAVE port/Serial port/Ethernet port			
COM port	COM0:RS232/R	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS23			
Expansion port	None	Profibus-DP	CANopen	MPI	
Electrical specification					
Rated power	10.8 W				
Rated voltage		DC24V			
Input range		21~	28VDC		
Momentary power-off		<	3ms		
Insulation resistance		Greater than 5	60MΩ@ 500V DC		
Dielectric strength test		500V AC	C 1 minute		
Structure specification					
Shell color		Ligh	it-gray		
Shell material		F	ABS		
Dimensions(mm)		235×1	.72×57.9		
Cutout size(mm)		224	×161		
Weight		1	27kg		
Environment specification					
Operating temperature			45 ℃		
Operating humidity		10~90% no	n-condensing		
Storage temperature		-10~60℃			
Storage humidity	10~90% non-condensing				
Shockproof test		10~25Hz (X, Y, Z direction, 2G, 30 minutes)			
Cooling method		Natural air cooling			
Certification					
Degree of protection		IP65 (fr	ont panel)		
CE certification	Comply	with EN61000-6-2:2005	and EN61000-6-4:2007	standards	
FCC compatibility		Complies wi	th FCC Class A		

MT5000 Series

Technical Specifications



Model	MT5423T	MT5423T-DP	MT5423T-CAN	MT5423T-MPI	
Performance specification					
Display		8"	TFT		
Resolution		800×6	00 pixels		
Color			5536		
Backlight		L	.ED		
Brightness		300cd/m²			
Backlight life		50000 hr.			
Touch Panel		4-wire precision resistance network			
Processor		32-bit RISC	CPU 520MHz		
Memory		16M FLASH	, 32M SDRAM		
Recipe memory & RTC		512KF	B & RTC		
Expandable memory		1 SD Card,	2 USB HOST		
Printer port			erial port		
Ethernet			D Base-T		
Audio interface		-	put interface		
Vedio interface			one		
Program download		1 USB SLAVE port/Serial port/Ethernet port			
COM port	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS232				
Expansion port	None	Profibus-DP	CANopen	MPI	
Electrical specification					
Rated power		8	3 W		
Rated voltage		DC24V			
Input range		12~	28VDC		
Momentary power-off		<	3ms		
Insulation resistance		Greater than 5	0MΩ@ 500V DC		
Dielectric strength test		500V AC	1 minute		
Structure specification					
Shell color		Ligh	t-gray		
Shell material			ABS		
Dimensions(mm)		235×1	72×57.9		
Cutout size(mm)		224	×161		
Weight		1.7	27kg		
Environment specification			,		
Operating temperature		0~	45 ℃		
Operating humidity		10~90% no	n-condensing		
Storage temperature			~60°C		
Storage humidity	10~90% non-condensing				
Shockproof test	10~25Hz (X, Y, Z direction, 2G, 30 minutes)				
Cooling method	Natural air cooling				
Certification			, in the second second		
Degree of protection		IP65 (fr	ont panel)		
CE certification	Comply	with EN61000-6-2:2005		7standards	
FCC compatibility			th FCC Class A		

Technical Specifications



Model	MT5520T	MT5520T-DP	MT5520T-CAN	MT5520T-MP1	
Performance specification					
Display		10.4	l" TFT		
Resolution		640×4	80 pixels		
Color		65536			
Backlight		2 CCFL			
Brightness		400	cd/m²		
Backlight life		500	00 hr.		
Touch Panel		4-wire precision	resistance network		
Processor		32-bit RISC	CPU 520MHz		
Memory		16M FLASH	, 32M SDRAM		
Recipe memory & RTC		512K	B & RTC		
Expandable memory		1 SD Card,	2 USB HOST		
Printer port		USB/S	erial port		
Ethernet		10/10	0 Base-T		
Audio interface		1 Audio out	tput interface		
Vedio interface		N	one		
Program download		1 USB SLAVE port/Serial port/Ethernet port			
COM port	COM0:RS232/R	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS2			
Expansion port	None	Profibus-DP	CANopen	MPI	
Electrical specification					
Rated power	12 W				
Rated voltage		DO	C24V		
Input range		21~	28VDC		
Momentary power-off		<	3ms		
Insulation resistance		Greater than 5	0MΩ@ 500V DC		
Dielectric strength test		500V AC	1 minute		
Structure specification					
Shell color		Ligh	t-gray		
Shell material		A	ABS		
Dimensions(mm)		310.6×2	30.6×55.7		
Cutout size(mm)		298	×218		
Weight		2	2kg		
Environment specification					
Operating temperature			45℃		
Operating humidity		10∼90% nc	n-condensing		
Storage temperature		-10	~60℃		
Storage humidity		10~90% non-condensing			
Shockproof test		10~25Hz (X, Y, Z direction, 2G, 30 minutes)			
Cooling method		Natural	air cooling		
Certification					
Degree of protection		IP65 (fr	ont panel)		
CE certification	Comply	with EN61000-6-2:2005	and EN61000-6-4:2007	standards	
FCC compatibility		Complies wi	th FCC Class A		

MT5000 Series

Technical Specifications



Model	MT5620T	MT5620T-DP	MT5620T-CAN	MT5620T-MP	
Performance specification					
Display		12.1	L" TFT		
Resolution		800×6	000 pixels		
Color		65536			
Backlight		2 CCFL			
Brightness		250	cd/m²		
Backlight life		500	00 hr.		
Touch Panel		4-wire precision	resistance network		
Processor		32-bit RISC	CPU 520MHz		
Memory		16M FLASH	, 32M SDRAM		
Recipe memory & RTC		512K	B & RTC		
Expandable memory		1 SD Card,	2 USB HOST		
Printer port		USB/S	erial port		
Ethernet		10/10	0 Base-T		
Audio interface		1 Audio out	tput interface		
Vedio interface		2 PAL signal video inpu	t interface,BNC connecto	or	
Program download		1 USB SLAVE port/Serial port/Ethernet port			
COM port	COM0:RS232/R	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS2			
Expansion port	None	Profibus-DP	CANopen	MPI	
Electrical specification					
Rated power		15.6 W			
Rated voltage		DC24V			
Input range		21~	28VDC		
Momentary power-off		<	3ms		
Insulation resistance		Greater than 5	i0MΩ@ 500V DC		
Dielectric strength test		500V AC	C 1 minute		
Structure specification					
Shell color		В	lack		
Shell material		M	etal		
Dimensions(mm)		350×2	64×48.7		
Cutout size(mm)		327	×241		
Weight		4.	.3kg		
Environment specification					
Operating temperature		-10	~60℃		
Operating humidity		10~90% no	n-condensing		
Storage temperature		-20	~70℃		
Storage humidity		10~90% non-condensing			
Shockproof test		10~25Hz (X, Y, Z direction, 2G, 30 minutes)			
Cooling method		Natural	air cooling		
Certification					
Degree of protection		IP65 (fr	ont panel)		
CE certification	Comply v	with EN61000-6-2:2005	and EN61000-6-4:2007	'standards	
FCC compatibility		Complies wi	th FCC Class A		

Technical Specifications

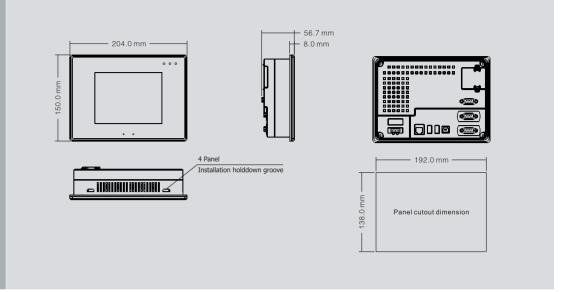


Model	MT5720T	MT5720T-DP	MT5720T-CAN	MT5720T-MPI	
Performance specification					
Display		15'	TFT		
Resolution		1024×7	68 pixels		
Color		65	536		
Backlight	2 CCFL				
Brightness		250	cd/m²		
Backlight life		500	00 hr.		
Touch Panel		4-wire precision	esistance network		
Processor		32-bit RISC	CPU 520MHz		
Memory		16M FLASH	32M SDRAM		
Recipe memory & RTC		512KE	3 & RTC		
Expandable memory		1 SD Card,	2 USB HOST		
Printer port		USB/Se	erial port		
Ethernet		10/100) Base-T		
Audio interface		1 Audio out	put interface		
Vedio interface		2 PAL signal video input	interface,BNC connecto	or	
Program download	1 USB SLAVE port/Serial port/Ethernet port				
COM port	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS232				
Expansion port	None	Profibus-DP	CANopen	MPI	
Electrical specification					
Rated power	16.8 W				
Rated voltage		DC	24V		
Input range		21~2	28VDC		
Momentary power-off		<:	Bms		
Insulation resistance		Greater than 5	0MΩ@ 500V DC		
Dielectric strength test		500V AC	1 minute		
Structure specification					
Shell color		Bl	ack		
Shell material		М	etal		
Dimensions(mm)		406. 5×3	13. 5×48.3		
Cutout size(mm)		387.5	×294.5		
Weight		5.	1kg		
Environment specification					
Operating temperature		0~	50℃		
Operating humidity		10~90% no	n-condensing		
Storage temperature			-60 ℃		
Storage humidity		10~90% non-condensing			
Shockproof test		10~25Hz (X, Y, Z direction, 2G, 30 minutes)			
Cooling method		Natural air cooling			
Certification					
Degree of protection		IP65 (fro	ont panel)		
CE certification	Comply	with EN61000-6-2:2005	and EN61000-6-4:2007	standards	
FCC compatibility		Complies wit	th FCC Class A		

Dimensions (Unit:mm)

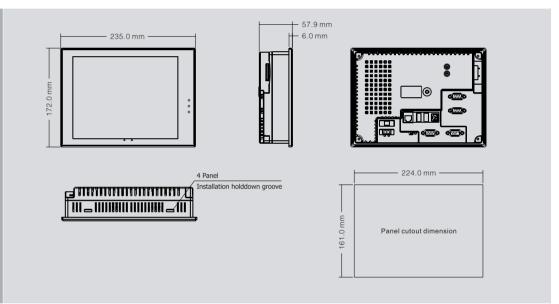
MT5320C MT5320C-DP MT5320C-MPI

MT5320T MT5320T-MPI

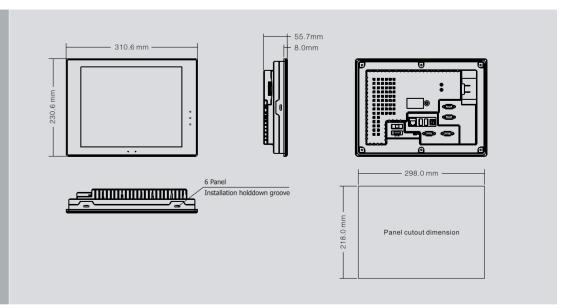


MT5420T MT5420T-DP MT5420T-CAN MT5420T-MPI

MT5423T MT5423T-DP MT5423T-CAN MT5423T-MPI

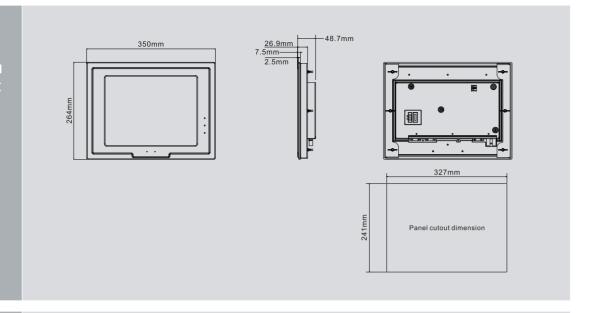


MT5520T-DP MT5520T-CAN MT5520T-MPI

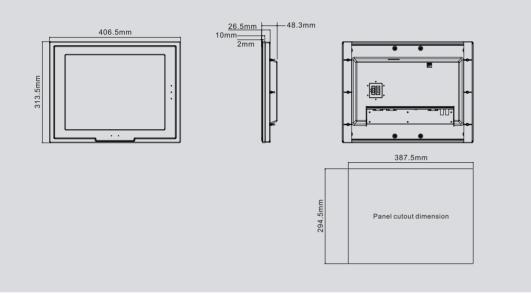


Dimensions (Unit:mm)

MT5620T MT5620T-DP MT5620T-MPI



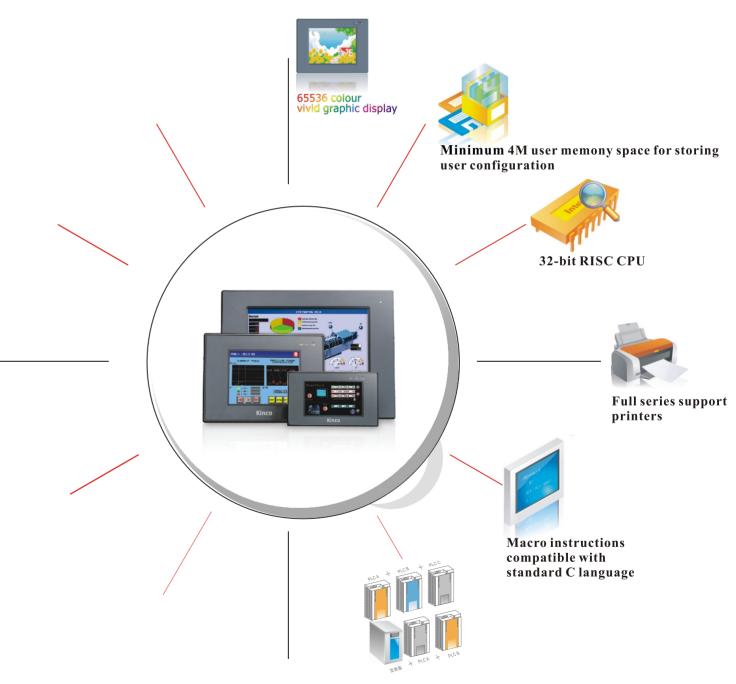
MT5720T MT5720T-DP MT5720T-CAN MT5720T-MPI



System Description

As the industrial competition is getting fiercer, more and more customers demand HMI products featuring more powerful functions, more convenient operation, quicker response speed, and lower cost. As an upgraded version, the MT4000 is designed to meet customer requirements. It derives from our consistent efforts to improve HMI touch screens and represents one of the many high-performance products for industrial applications.

Inheriting most of the functions of the high-end MT5000 series, the MT4000 adopts the 32-bit RISC CPU, capable of calling complicated shapes and satisfying the requirements of most customers. It can communicate directly with many PLCs, while no special program is required for data transfer with these PLCs. In addition, it supports such functions as online simulation, super-large storage space for user configurations, and macros compatible with the standard C language. It can perform on-site data collection, processing, monitoring, and output in a quick, effective, and secure way.



Three serial ports are simultaneously connected to such industrial control devices as PLC, inverter or servo driver

Hardware Description

Standard configuration

Three high-speed serial ports One USB SLAVE port One printer port

> USB download greatly accelerates the download speed of user configurations

The traditional HMI uses a serial port to download, with the maximum download speed is about 11.5K bytes/s. MT4000 uses USB1.1 port to download data from device, with a speed as high as 100K bytes/s. which greatly improves the configuration download

speed. (A new version capable of data exchange with USB flash disk is to be launched soon£

RJ45 Ethernet interface supports the connection between HMI and

Ethernet controller or PC

Connected to printer with parallel port, Provide stable and smooth printing

Supporting the connection to mainstream ink-jet and laser printers and mini printers.



Supporting simultaneous communications via multiple serial ports

MT4000 series support communication connection in RS232, RS485 and RS422 modes. The three communication ports of the standard hardware can support different PLC communication protocols at the same time and can be connected to different controllers. The three ports are completely independent. The PLC communication failure of one port will not affect the communication of the other port, featuring high reliability.





Quick-melting fuse to ensure the safety of machines in emergencies



MT4000 Series Features

- 10M/100M Ethernet interface, supports Ethernet communication based on CS structure, could be used for the setting of system parameters and online simulation of project configuration, multiple HMIs could be linked via Ethernet, could communicate with PC and PLC via Ethernet interface, could exchange data with controller which supports Ethernet communication via OPC software (only applicable to MT4000E series);
- 65536 true color TFT LCD, supports the import multiple windows image formats, such as BMP, JPG, GIF; supports all fonts of windows platform, supports 4 languages of interface display;
- 32-bit, 400MHz RISC CPU;
- > 8M FLASH ROM + 16M SDRAM, larger storage space;
- > Compatible with major PLCs and controllers, could provide customer-made communication drive program rapidly;
- > 256KB recipe memory, could record data easily, convenient for user to inquire;
- > Supports the timing of a minimum of 100ms, configured with multiple functions such as timing data transfer, value accumulation, decrease and macro instruction;
- Real-time clock, could reserve time for more than 2 years at power-off state;
- > 3 COM ports, supports simultaneous communications with controllers of 3 different protocols, supports RS232/RS422/RS485 mode;
- > 1 USB SLAVE port, greatly accelerates the download speed of user configuration;
- One DB15/DB25 printer port;
- > Powerful configuration software-EV5000 supports macro commands and provides rich drawing library.

Technical Specifications





MT4210T

MT4220TE

Model	MT4210T	MT4220TE		
Performance specification				
Display	4.3"	TFT		
Resolution	480×27	2 pixels		
Color	65536 colors			
Backlight	LED			
Brightness	300c	d/m²		
Backlight life	5000	0 hr.		
Touch Panel	4-wire precision re	esistance network		
Processor	32-bit RISC CPU 400MHz	32-bit RISC CPU 800MHz		
Memory	128M FLASH	+ 64M SDRAM		
Expandable memory	None	1 USB host, 1 SD card		
Recipe memory & RTC	512KB			
Printer port	Serial port	Serial port/USB port		
Ethernet	None	Support		
Program download	USB SLAVE/Serial port	USB SLAVE/Serial port/Ethernet port		
COM port	COM0:RS232/RS485-2/	RS485-4, COM2:RS232		
Electrical specification				
Rated power	3.5	W		
Rated voltage	DC24V			
Input range	12~28VDC			
Power down allowed	<3ms			
Insulation resistance	Greater than 50M Ω @ 500V DC			
Dielectric strength test	500VAC :	1 minute		
Structure specification				
Shell color	Bla	ick		
Shell material	AE	3S		
Dimensions(mm)	154×89	9×59.8		
Cutout size(mm)	1452	×81		
Weight	0.34	4kg		
Environment specification				
Operating temperature	-20~	55 ℃		
Operating humidity	10~90% non	-condensing		
Storage temperature	-25~			
Storage humidity	10~90% non-condensing			
Shockproof test	10~25Hz (X, Y, Z direction, 2G, 30 minutes)			
Cooling method	Natural air cooling			
Certification				
Degree of protection	IP65 (fro			
CE certification	Comply with EN61000-6-2:2005 a	and EN61000-6-4:2007standards		
FCC compatibility	Complies with	n FCC Class A		

MT4000 Series

Technical Specifications





MT4300C/MT4300CE

MT4300T/MT4300TE

Model	MT4300C	MT4300CE	MT4300T	MT4300TE	
Performance specification					
Display	5.6	" TFT	5.7	" TFT	
Resolution	320×2	234 pixels	320×2	40 pixels	
Color		65536 c	olors		
Backlight	1	.ED	100	CFL	
Brightness	300	Ocd/m ²	500	cd/m²	
Backlight life		50000	hr.		
Touch Panel		4-wire precision res	sistance network		
Processor		32-bit RISC CI	PU 400MHz		
Memory		8M FLASH, 16	5M SDRAM		
Expandable memory		Non	е		
Recipe memory & RTC		256KB 8	RTC		
Printer port		DB15/Ser	ial port		
Ethernet	None	None Support None		Support	
Program download	USB SLAVE/ Serial port	USB SLAVE/Serial port/ Ethernet port	USB SLAVE/ Serial port	USB SLAVE/Serial port, Ethernet port	
COM port	COM0:RS232/R	S485-2/RS485-4, COM1:R	S232/RS485-2/RS48!	5-4, COM2:RS232	
Electrical specification					
Rated power	6	5 W	9.6 W		
Rated voltage	D	C24V	DC24V		
Input range	12~	28VDC	21~28VDC		
Power down allowed		<5m	1S		
Insulation resistance		Greater than 50M	1Ω@ 500V DC		
Dielectric strength test		500V AC 1	minute		
Structure specification					
Shell color		Blac	k		
Shell material		ABS	3		
Dimensions(mm)		204×15	0×52		
Cutout size(mm)		192×:	138		
Weight		0.85	kg		
Environment specification					
Operating temperature	0~	45℃	-10~	,70 ℃	
Operating humidity		10~90% non-	condensing		
Storage temperature	-10	0~60℃	-20~75℃		
Storage humidity		10~90% non-	condensing		
Shockproof test		10~25Hz (X, Y, Z direct	ion, 2G, 30 minutes)		
Cooling method		Natural air	cooling		
Certification					
Degree of protection		IP65 (fron	t panel)		
CE certification	Comply	with EN61000-6-2:2005 ar	nd EN61000-6-4:2007	standards	
FCC compatibility		Complies with	FCC Class A		

Technical Specifications





MT4404T/MT4404TE MT4424T/MT4424TE

MT4414T/MT4414TE

Model	MT4404T	MT4404TE	MT4414T	MT4414TE	MT4424T	MT4424TE
Performance specification						
Display			7'' 16	:9 TFT		
Resolution			800×48	30 pixels		
Color			65536	colors		
Backlight			LE	ED .		
Brightness			3000	cd/m²		
Backlight life	50000 hr.					
Touch Panel	4-wire precision resistance network					
Processor	32-bi	t RISC CPU 400	MHz	32-bit 800MHz RISC	32-bit RISC	CPU 624MHz
Memory	8M FLASH,	16M SDRAM	128M FLASH	, 64M SDRAM	128M FLASH, 6	4M Mobile DDR
Expandable memory		None		1 USB host	1 USB hos	t, 1 SD card
Recipe memory & RTC	256KB	& RTC	512KB	& RTC	128KB	& RTC
Printer port		Serial port			USB/Serial port	t
Ethernet	None	Support	None	Support	None	Support
Program download	USB SLAVE/ Serial port	USB SLAVE/ Serial port/ Ethernet port	USB SLAVE/ Serial port	USB SLAVE/ Serial port/ Ethernet port	USB SLAVE/ Serial port	USB SLAVE/ Serial port/ Ethernet port
COM port	COM1:RS232/RS	COM1:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM1:RS232/RS485-4, COM1:RS285-4, COM1:RS2			COM0:RS232/RS485-2/RS485-4 COM1:RS232/RS485-2/RS485-4 COM2:RS232	
Electrical specification						
Rated power	8'	W	4	W	8	W
Rated voltage	DC	24V	DC	24V	DC	24V
Input range	DC21	~28V	DC12	~28V	DC21	.~28V
Power down allowed	<5	ms	<3	ms	<5	ims
Insulation resistance			Greater than 50	OM Ω @ 500V DC		
Dielectric strength test			500V AC	1 minute		
Structure specification						
Shell color			Bla	ack		
Shell material			Al	BS		
Dimensions(mm)	206.8×12	24.2×45.1	204×1	.50×37	206.8×12	24.2×45.1
Cutout size(mm)	193.5	×112.5	192	×138	193.5	×112.5
Weight	0.0	Bkg	0.7	5kg	0.8	3kg
Environment specification						
Operating temperature	0~4	15℃	_	15℃	0~4	45℃
Operating humidity			10~90% noi	n-condensing		
Storage temperature	-10~	60℃	-10~	°60 ℃	-10^	,60 ℃
Storage humidity			10∼90% noi	n-condensing		
Shockproof test		10~25	Hz (X, Y, Z dire	ction, 2G, 30 m	inutes)	
Cooling method			Natural a	ir cooling		
Certification						
Degree of protection			IP65 (fro	nt panel)		
CE certification	Co	mply with EN6	1000-6-2:2005	and EN61000-6	-4:2007standa	rds
FCC compatibility			Complies wit	h FCC Class A		

MT4000 Series

Technical Specifications





MT4403T/MT4403TE

MT4512T/MT4512TE MT4522T/MT4522TE

Model	MT4403T	MT4403TE	MT4512T	MT4512TE	MT4522T	MT4522TE	
Performance specification							
Display	8" TFT		10.1" 16:9 TFT		10.1" 16:9 TFT		
Resolution	800×600 pixels		800×480 pixels		800×480 pixels		
Color	65536 colors		65536 colors		65536 colors		
Backlight	LED		LED		LED		
Brightness	250cd/m ²		320cd/m ²		320cd/m ²		
Backlight life	50000 hr.						
Touch Panel	4-wire precision resistance network						
Processor	32-bit RISC CPU 400		OMHz 32-bit 800MHz RISC		32-bit RISC CPU 400MHz		
Memory	8M FLASH,	8M FLASH, 32M SDRAM		, 64M SDRAM	16M FLASH,	32M SDRAM	
Expandable memory	None		1 USB host		1 USB Host, 1 SD Card		
Recipe memory & RTC	256KB & RTC		512KB & RTC		256KB & RTC		
Printer port	DB25/Se	erial port	Serial port		USB/Serial port		
Ethernet	None	Support	None	Support	None	Support	
Program download	USB SLAVE/ Serial port	USB SLAVE/ Serial port/ Ethernet port	USB SLAVE/ Serial port	USB SLAVE/ Serial port/ Ethernet port	USB SLAVE/ Serial port	USB SLAVE Serial port/ Ethernet po	
COM port	COM1:RS232/RS	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS232 COM2:RS232		5485-2/RS485-4, :RS232	COM0:RS232/RS485-2/RS485-4 COM1:RS232/RS485-2/RS485-4 COM2:RS232		
Electrical specification							
Rated power	8W		8W		8W		
Rated voltage	DC24V		DC24V		DC24V		
Input range	DC12~28V		DC12~28V		DC12~DC28V		
Power down allowed	<5ms						
Insulation resistance	Greater than 50MΩ@ 500V DC						
Dielectric strength test	500V AC 1 minute						
Structure specification							
Shell color	Bla	Black		Black		Black	
Shell material	ABS		ABS		ABS		
Dimensions(mm)	235×172×53		310×230×55		310×230×58		
Cutout size(mm)	224×161		298×218		298×218		
Weight	1.3kg		2kg		2kg		
Environment specification							
Operating temperature	-10~45℃		0~45℃		0~45℃		
Operating humidity	10~90		10~90% nor	10~90% non-condensing			
Storage temperature	-20~60℃		-10~60℃		-10~60℃		
Storage humidity	10~90% non-condensing						
Shockproof test	10~25Hz (X, Y, Z direction, 2G, 30 minutes)						
Cooling method			Natural a	ir cooling			
Certification							
Degree of protection	IP65 (front panel)						
CE certification	Co	Comply with EN61000-6-2:2005 and EN61000-6-4:2007standards					
FCC compatibility	Complies with FCC Class A						

Technical Specifications



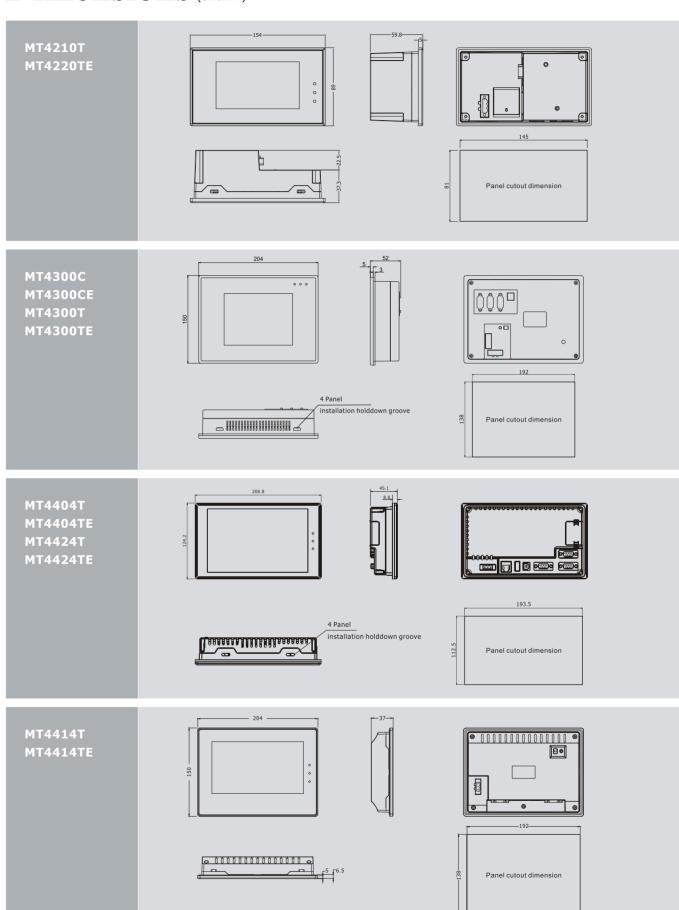


MT4523T/MT4523TE

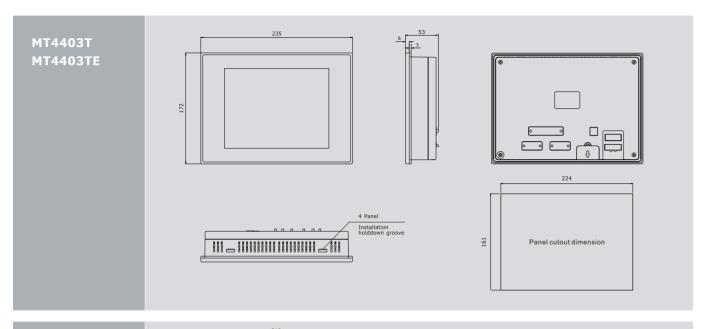
MT4620TE

Model	MT4523T	MT4523TE	MT4620TE				
Performance specification							
Display	10.4"	16:9 TFT	12.1" TFT				
Resolution	800×	600 pixels	800×600 pixels				
Color	6553	36 colors	65536 colors				
Backlight		LED	LED				
Brightness	30	0cd/m²	450cd/m ²				
Backlight life		50000 hr.					
Touch Panel	4-wire precision resistance network						
Processor	32-bit RISC	CPU 520MHz	32-bit RISC CPU 800MHz				
Memory	16M FLASH	, 32M SDRAM	1Gbit NAND Flash + 64M DDR2-667				
Expandable memory		1 USB HOST	1 SD Card, 1 USB HOST				
Recipe memory & RTC	256KI	3 & RTC	128KB & RTC				
Printer port	USB SLAVI	E/Serial port	USB SLAVE/Serial port/Ethernet port				
Ethernet	None	Support	Support				
Program download	USB SLAVE/ Serial port	USB SLAVE/Serial port/ Ethernet port	USB SLAVE/Serial port/ Ethernet port				
COM port	COM0:RS232/RS485-2/RS485-4, COM1:RS232/RS485-2/RS485-4, COM2:RS232						
Electrical specification			,				
Rated power		12 W	10 W				
Rated voltage	D	C24V	DC24V				
Input range	DC12	2~DC28V	DC21~DC28V				
Power down allowed	<5ms						
Insulation resistance	Greater than 50M Ω @ 500V DC						
Dielectric strength test	500V AC 1 minute						
Structure specification							
Shell color	[Black	Cold gray				
Shell material		ABS	ABS				
Dimensions(mm)	310>	×230×55	350×260×54				
Cutout size(mm)	29	8×218	340×250				
Weight		2kg	4.4kg				
Environment specification							
Operating temperature	04	~45℃	-10~55℃				
Operating humidity		10~90% non-conde	ensing				
Storage temperature	-10	0~60℃	-20~60℃				
Storage humidity	10~90% non-condensing						
Shockproof test	10~25Hz (X, Y, Z direction, 2G, 30 minutes)						
Cooling method	Natural air cooling						
Certification							
Degree of protection	IP65 (front panel)						
CE certification	Comply with EN61000-6-2:2005 and EN61000-6-4:2007standards						
FCC compatibility	Complies with FCC Class A						

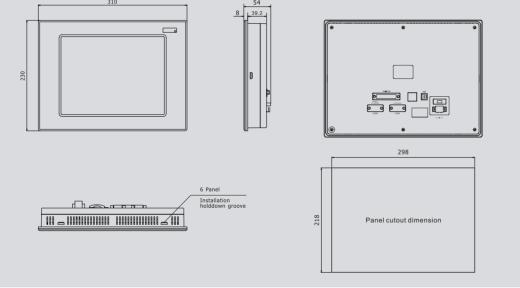
Dimensions (Unit:mm)



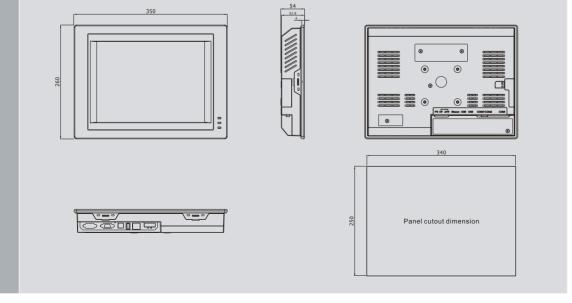
Dimensions (Unit:mm)



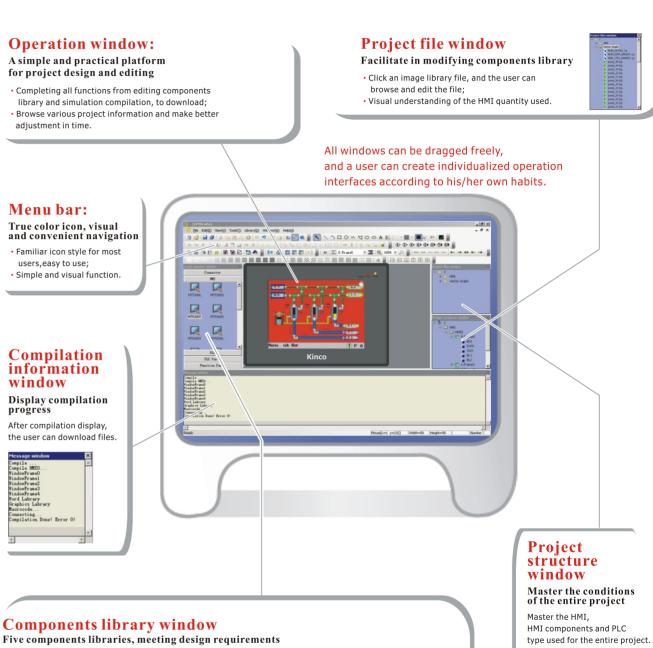
MT4512T MT4512TE MT4522T MT4522TE MT4523T MT4523TE







Software Description





Communication



Touch screen





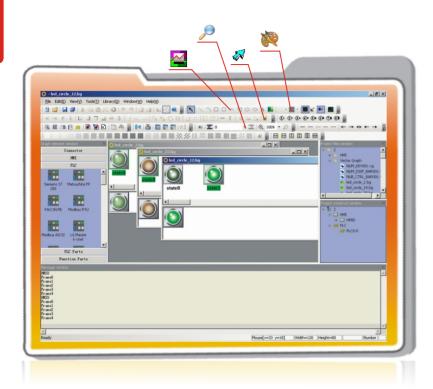
PLC





PLC components Functional components

Software Description



Completely support contrast and brightness adjustment

The contrast and brightness of the LCD can be adjusted online through setting special register without the need to adjust them by means of jumper switch or potentiometer.

Rich components library resources

Facilitate in making beautiful configuration interfaces

The original components libraries of the EV5000 can meet design requirements in most cases. If a customer has special requirement, he can build own graph library with the drawing tools of EV5000 software. EV5000 has a huge number of 3D effect components which facilitate in making mobile 3D graphics and animation.

Digital photos/Corporate logo import

The EV5000 supports the import of multiple Windows image formats, such as JPEG, GIF and BMP. The user can import their own logo or other images as initial screen.

Supporting all fonts of the Windows platform

In graphic mode, static text can be displayed in any fonts supported by the windows system on the configuration interface. The user has more choice for fonts now.

Recipe editing function

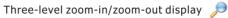
Providing 256K Words recipe memory, without any loss upon power failure, facilitating the setting and modification of initial values of the equipment, capable of providing multiple different recipes for the controller.

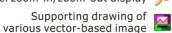
Perfect event log function

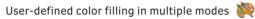
It can store records of events occurred during production, without any loss upon power failure, facilitating invocation anytime; if necessary, this function can be used to learn the operational history of the equipment and improve the design of the process flow.

Powerful vector graphic function, supporting drawing of arcs, sectors, scales and pointers

Eight line width options 🔊







Password protection

Three different authority levels, authorized operators can execute necessary setting and operations according to their authority level. The security performance of the system is greatly enhanced.

Multi-language application environment

Any language supported by Windows can be displayed on the panel. The user can use up to 4 languages within a project, which makes it possible for global users to share their wisdom with their clients worldwide.



Bitman image

Vector graph







Software Description



Learn compiling macro commands in ten minutes

Macro codes compatible with standard C language can be triggered in multiple methods, featuring powerful function and flexible use.

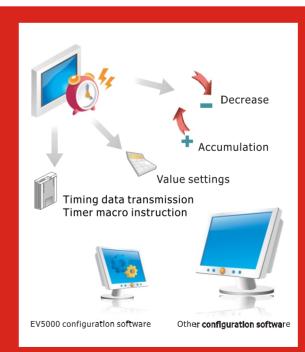
In the past

Most HMIs in the market use respectively defined script languages, lack of versatility, which are hard to learn since there is no sufficient reference resources, and furthermore they cannot be implanted into other HMI panels.

The EV5000 provides unique macro instruction compilation fully compatible with the standard C language. If you are familiar with the C language, you can learn how to code macro instructions in ten minutes. The rich reference documents, powerful function, and easy portability greatly enhance the macro command function of the EV5000.



Software



Powerful online networking and synchronous communication function and rapid processing speed have simplified the complicated process flow design.

Powerful timer function

The timer of MT5000 can implement the timing of a minimum of 100 ms, featuring accurate timing;

iConfigured with multiple functions such as timed data transfer, value settings, accumulation, decrease, and timed macro instruction; iMultiple trigger modes such as register trigger and initialization trigger, to facilitate users in implementing flexible configuration programming.

Customizable startup LOGO window

Different from other HMIs which do not have any screen display upon startup, the MT5000 can immediately display a user-defined LOGO upon power-on until the configuration window finishes startup, lasting about five seconds. The user can freely edit and modify the startup window.

Kinco provides important sub-system to a world-famous healthcare equipment manufacturer.

Kinco satisfies the most rigid quality requirement in healthcare industry.

- **System function:** control and drive the motion of patient table for MRI inspection.
- **Features:** Ultra-low RF emission, withstand strong magnetic interference.



Operator Terminal for construction machine

KG/KW series operator terminal, serving famous heavy machine builders all over China.

■ Features:

- CAN bus interface;
- Compatible with protocols of major controllers;
- Enhanced structure design, withstand shock and extreme temperature;
- Enhanced EMC design, withstand harsh interference;
- User-friendly editing software.





KincoCut paper cutter control system

Together with leading paper cutter manufacture in China, Kinco presents advanced cutter control system at competitive cost.

■ Features:

- Advanced performance;
- Optimized CIP3 and CIP4 technology, compatible with printing data format standard;
- All major components from Kinco, ensure quality and competitive cost.





Tower crane safety controller

Kinco-TB safety controller, compatible with GB/T5031-2008 standard, protect your assets and staff.

■ Features:

- Display system critical status and parameters in real time;
- Alarm when critical status events occur;
- Record system log;
- Flexible and easy to be expanded.





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