



# **Human-machine Interface**

**Product Catalog** 

# Corporate Profile



Kinco Automation is a leading supplier of industrial automation products and solutions from China with full line of automation products including industrial human machine interfaces (HMI), AC servo systems, stepper systems, PLC, VFD and field bus products. Kinco aims to help you achieve a leading position in your market.

#### **Reliable partner of your success**

Gain the competitive edge Support your business Serve your needs

#### **High standard of quality management**

100% function and reliability test before delivery Quality control and tracking go through the full product life cycle Certificated process control and quality management capability

#### **Proven performance**

Customers in over 40 countries and in diverse markets and sectors

#### **Perpetual innovation**

8% of annual turnover invested in R&D
Experienced international R&D teams
Patent applications continue to rise every year
Market-driven R&D: we organize our R&D
activities around the voice from the customers



### MT4000 Series 03

System Description Hardware Description Technical Specification Dimensions

### MT5000 Series 13

System Description Hardware Description Technical Specification Dimensions

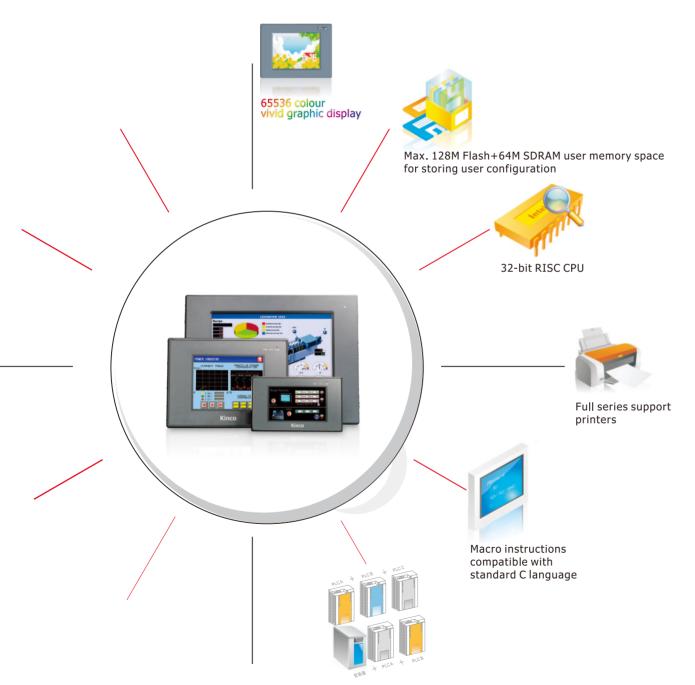
# Text Display MD200/300 Series 25

### Software Description 27

### **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.

Supporting almost all the mainstream functions for Middle-End applications with high performance, 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.



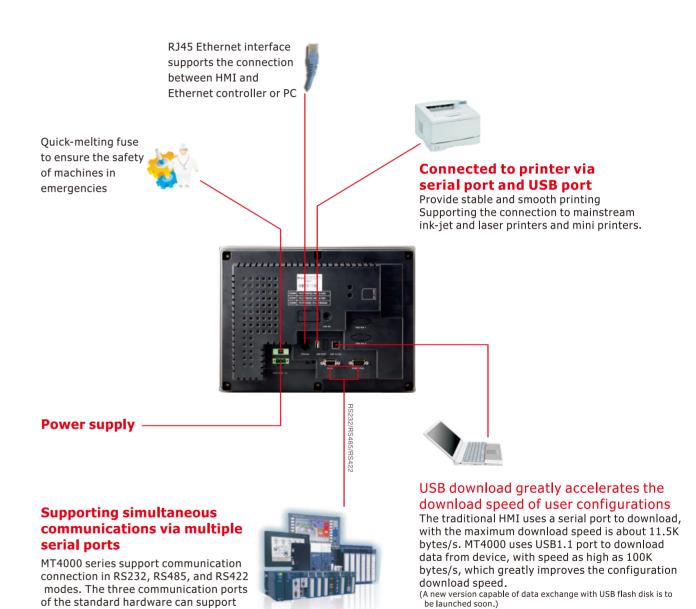
Three serial ports are simultaneously connected to such industrial control devices as PLC, inverter or servo driver

### **Hardware Description**

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.

Standard configuration

Three high-speed serial ports
One USB SLAVE port



 $\mathbf{U}$ 

### 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, up to 800MHz RISC CPU;
- > 128M Max. FLASH ROM + 64M Max. SDRAM/DDR, larger storage space;
- Compatible with major PLCs and controllers, could provide customer-made communication drive program rapidly;
- Max. 512KB 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;
- Connect to printer via serial port and USB port;
- > Powerful configuration software-Kinco HMIware supports macro commands and provides rich drawing library.

### MT4000 Series

### **Technical Specifications**





MT4210T

MT4220TE

Model	MT4210T	MT4220TE				
Performance specification						
Display	4.3"	TFT				
Resolution	480×272	2 pixels				
Color	65536 colors					
Backlight	LEI	D				
Brightness	300cc	d/m²				
Backlight life	50000	0 hr.				
Touch Panel	4-wire precision re	sistance 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 -	+ RTC				
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/R	RS485-4, COM2:RS232				
Electrical specification						
Rated power	4.8	W				
Rated voltage	DC24V					
Input range	12~28VDC					
Power down allowed	<5ms					
Insulation resistance	Greater than 50M Ω @ 500V DC					
Dielectric strength test	500VAC 1 minute					
Structure specification						
Shell color	Blac	ck				
Shell material	AB	S				
Dimensions(mm)	154×8	9×60				
Cutout size(mm)	145×	<81				
Weight	0.34	łkg				
Environment specification						
Operating temperature	-20~5	55℃				
Operating humidity	10~90% non-	-condensing				
Storage temperature	-25~6					
Storage humidity	10~90% non-	-condensing				
Shockproof test	10~25Hz (X, Y, Z direct	tion, 2G, 30 minutes)				
Cooling method	Natural air	r cooling				
Certification						
Degree of protection	IP65 (fron	nt panel)				
CE certification	Comply with EN61000-6-2:2005 a	nd EN61000-6-4:2007standards				
FCC compatibility	Complies with	FCC Class A				
UL certification	Comply with UL 508	None				

### **MT4000 Series**

## **Technical Specifications**



MT4300C/MT4300CE/MT4310C

Model	MT4300C	MT4300CE	MT4310C						
Performance specification									
Display		5.6" TFT							
Resolution	320×234 pixels								
Color	65536 colors								
Backlight	LED								
Brightness	300cd/m <sup>2</sup>								
Backlight life		50000 hr.							
Touch Panel	4	4-wire precision resistance networ	·k						
Processor	32-bit RISC CPU 400MHz	32-bit RISC CPU 800MHz	32-bit RISC CPU 400MHz						
Memory		128M Flash+64M SDRAM							
Expandable memory		None							
Recipe memory & RTC		512KB & RTC							
Printer port		Serial port							
Ethernet	None	Support	None						
Program download	USB SLAVE/ Serial port	USB SLAVE/Serial port/ Ethernet port	USB SLAVE/ Serial port						
COM port	COM0:RS232/RS485-2/RS485-4, COM2:RS232/RS485-2, COM1:RS232/RS485-4, COM2:RS232 RS485-4, COM2: RS232								
Electrical specification									
Rated power		4 W							
Rated voltage		DC24V							
Input range		12~28VDC							
Power down allowed		<5ms							
Insulation resistance		Greater than 50M Ω @ 500V DC							
Dielectric strength test		500V AC 1 minute							
Structure specification									
Shell color		Black							
Shell material		ABS							
Dimensions(mm)		204×150×52							
Cutout size(mm)		192×138							
Weight	3.0	35kg	0.75kg						
Environment specification									
Operating temperature		0~50℃							
Operating humidity		10~90% non-condensing							
Storage temperature		-10~60℃							
Storage humidity	10~90% non-condensing								
Shockproof test	10~7	25Hz (X, Y, Z direction, 2G, 30 min	iutes)						
Cooling method		Natural air cooling	•						
Certification									
Degree of protection		IP65 (front panel)							
CE certification	Comply with EN	61000-6-2:2005 and EN61000-6-4	4:2007standards						
FCC compatibility		Complies with FCC Class A							

### **MT4000 Series**

### **Technical Specifications**





MT4404T/MT4424TE

MT4414T/MT4414TE MT4414TE-CAN

Model	MT4404T	M	1T4414T	MT4414T	E*	MT4424TE			
Performance specification									
Display			7" 16	5:9 TFT					
Resolution		800×480 pixels							
Color		65536 colors							
Backlight			L	ED					
Brightness			300	cd/m²					
Backlight life				00 hr.					
Touch Panel		4-wire precision resistance network							
Processor	32-bit RISC C					32-bit RISC CPU 800MHz			
Memory	128M Flash+64M DDR2		128M FLASH	I+64M SDRAM		128M Flash+64M DDR2			
Expandable memory	None			1 USB host		1 USB host, 1 SD card			
Recipe memory & RTC			512KI	3 & RTC					
Printer port	Serial	port	922		USB/Se	erial port			
Ethernet	None	po. c	None	Support	000,00	Support			
Program download	USB SLAVE/S	Serial no			F/Serial	port/Ethernet port			
COM port	COM0:RS232/RS485-2/ RS485-4, COM1:RS232/ RS485-2/RS485-4, COM2:RS232		COM0:RS232/R	S485-2/RS485-4, 1:RS232		COM0:RS232/RS485-2/ RS485-4, COM1:RS232/ RS485-2/RS485-4, COM2:RS232			
Electrical specification									
Rated power	8W		4	1W	8W				
Rated voltage	DC24V		DC	24V	DC24V				
Input range	21~28VDC, in-built isolated power	er supp <b>l</b> y.	12~28VDC		21~28VDC, in-built isolated power sup				
Power down allowed	<5ms		<3ms			<5ms			
Insulation resistance			Greater than 5	0M Ω @ 500V DC					
Dielectric strength test			500V AC	1 minute					
Structure specification	·								
Shell color			В	ack					
Shell material			Д	BS					
Dimensions(mm)	206.8 × 124.2 × 45.1	L	204×	150×37	2	206.8 × 124.2 × 45.1			
Cutout size(mm)	193.5 × 112.5		192	×138		193.5 × 112.5			
Weight	0.8kg		0.7	75kg	0.8kg				
Environment specification	3								
Operating temperature			0~	<b>50</b> ℃					
Operating humidity				n-condensing					
Storage temperature				~60°C					
Storage humidity				n-condensing					
Shockproof test		10~2		ection, 2G, 30 min	utes)				
Cooling method				air cooling					
Certification			racarar	cooming					
Degree of protection			IP65 (fr	ont panel)					
CE certification	Comply w	vith FNA		and EN61000-6-4	1.2007c	tandards			
FCC compatibility	Comply v	THE LINE			20073	turiuurus			
	Complies with FCC Class A  None  Comply with UL 508								

<sup>\*</sup> MT4414TE-CAN with CANopen interface, other specifications are same with MT4414TE.

### **MT4000 Series**

### **Technical Specifications**





MT4403T/MT4403TE

MT4512T/MT4512TE MT4522T/MT4522TE

Model	MT4403T	MT4403TE	MT4512T	MT4512TE	MT4522T	MT4522TE	
Performance specification							
Display	8"	TFT	10.1" 1	6:9 TFT	10.1" 1	6:9 TFT	
Resolution	800 × 60	00 pixels	800 × 48	30 pixels	800 × 480 pixels		
Color	65536	colors	65536	colors	65536 colors		
Backlight	LE	ED	LE	ED	LI	ED	
Brightness	2500	cd/m²	3200	cd/m²	3200	cd/m²	
Backlight life			5000	00 hr.			
Touch Panel		4	-wire precision r	esistance networ	·k		
Processor	32-b	it RISC CPU 400	МНz	32-l	oit RISC CPU 800	MHz	
Memory			128M FLASH	+64M SDRAM			
Expandable memory		None		1 USB host	1 USB Host	t, 1 SD Card	
Recipe memory & RTC	256KB	& RTC	512KB	& RTC	512KB	& RTC	
Printer port	Seria	l 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 port	
COM port	COM1:RS232/RS	5485-2/RS485-4, 5485-2/RS485-4, :RS232			COM0:RS232/RS485-2/RS485-4 COM1:RS232/RS485-2/RS485-4 COM2:RS232		
Electrical specification							
Rated power	8	W	81	W	5.5W		
Rated voltage	DC	24V	DC2	24V	DC24V		
Input range	12~28VDC, in-bu	ilt isolated power supply.	12~2	8VDC	21~2	8VDC	
Power down allowed			<5	ms			
Insulation resistance			Greater than 50	MΩ@ 500V DC			
Dielectric strength test			500V AC	1 minute			
Structure specification							
Shell color	Bla	ack	Bla	ick	Bla	ack	
Shell material	Al	BS	AE	3S	ABS		
Dimensions(mm)	235 × 1	.72 × 53	310 × 2	30 × 55	310×230×55		
Cutout size(mm)	224	× 161	298 >	< 218	298×218		
Weight	1.3	Bkg	21	(g	1.47kg		
<b>Environment specification</b>							
Operating temperature	-10~	,50℃	0~5	0℃	0~5	50℃	
Operating humidity			10~90% non	-condensing			
Storage temperature	-20~	,60°C	-10~	60℃	-10~	60℃	
Storage humidity			10~90% nor	-condensing			
Shockproof test		10~2	5Hz (X, Y, Z dired	ction, 2G, 30 min	utes)		
Cooling method			Natural a	ir cooling			
Certification							
Degree of protection			IP65 (fro	nt panel)			
CE certification		Comply with EN6	51000-6-2:2005 a	and EN61000-6-4	1:2007standards		
FCC compatibility	Complies with FCC Class A						

### **MT4000 Series**

## **Technical Specifications**



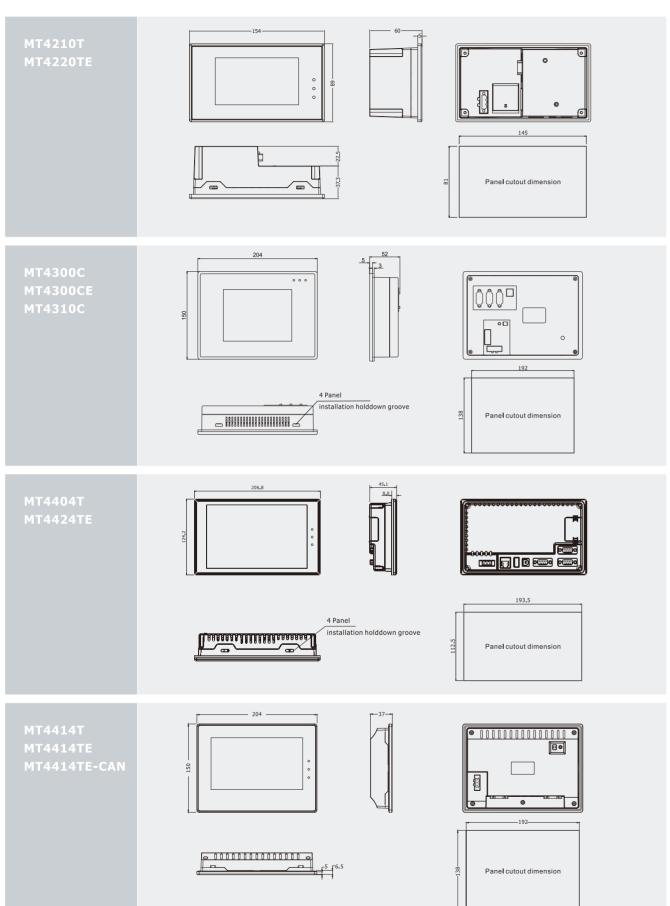


MT4523T/MT4523TE

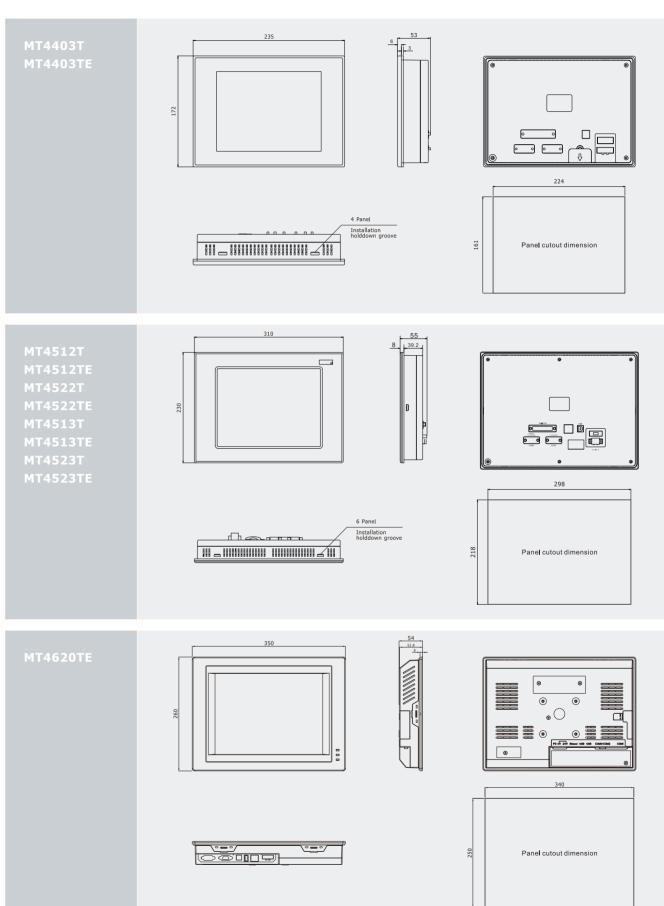
MT4620TE

Model	MT4513T	MT4513TE	MT4523T	MT4523TE	MT4620TE	
Performance specification						
Display	10.4	'TFT	10.4'	12.1" TFT		
Resolution	800 × 60	00 pixels	800 × 60	800 × 600 pixels		
Color	65536	colors	65536	colors	65536 colors	
Backlight	LE	ED	LE	D	LED	
Brightness	3000	cd/m²	3000	rd/m²	450cd/m <sup>2</sup>	
Backlight life			50000 hr.			
Touch Panel		4-wire	recision resistance	network		
Processor	400MHz RISC	800MHz RISC	520MH	z RISC	800MHz RISC	
Memory	128M FLASH+64M DDR2		128M FLASH-	+64M SDRAM	128M FLASH+ 64M DDR	
Expandable memory	None	1 USB HOST	1 SD Card, 1	L USB HOST	1 SD Card, 1 USB HOS	
Recipe memory & RTC	512KB	& RTC		& RTC	128KB & RTC	
Printer port	Serial port	USB SLAVE/ Serial port	USB SLAVE	/Serial port	USB SLAVE/Serial port Ethernet port	
Ethernet	None	Support	None	Support	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/ Ethernet port	
COM port	COM0:RS232/RS485-2	/RS485-4, COM2:RS232	COM0:RS232/RS485-2/RS	5-2/RS485-4, COM2:RS23		
Electrical specification						
Rated power	8	W	12	W	10 W	
Rated voltage	DC	24V	DC	DC24V		
Input range	10~2	8VDC	21~28VDC	ower supply.		
Power down allowed		<5	ms		<3ms	
Insulation resistance		Grea	ter than $50M\Omega@500$	OV DC		
Dielectric strength test			500V AC 1 minute			
Structure specification						
Shell color	Dark	gray	Bla	Cold gray		
Shell material	PC+	ABS	Al	PC		
Dimensions(mm)	310×2	30×55	310×2	30×55	350×260×54	
Cutout size(mm)	298	×218	298>	<218	340×250	
Weight	2	kg	21	кg	2kg	
Environment specification						
Operating temperature	0~5	50℃	0~5	<b>50</b> ℃	-10~55℃	
Operating humidity		10	~90% non-condens	ing		
Storage temperature	-10^	,60°C	-10~	-20~60℃		
Storage humidity		10	10~90% non-condensing			
Shockproof test		10~25Hz (⟩	, Y, Z direction, 2G,	30 minutes)		
Cooling method		`	Natural air cooling	•		
Certification						
Degree of protection			IP65 (front panel)			
CE certification	Co	mply with EN61000-	6-2:2005 and EN610	000-6-4:2007stand	ards	
FCC compatibility		. ,	mplies with FCC Clas			

### Dimensions (Unit:mm)



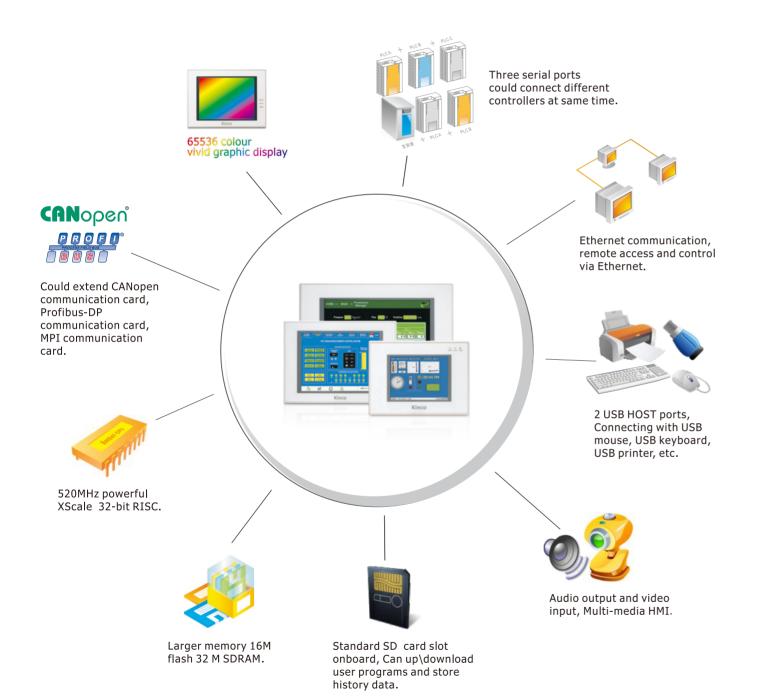
### Dimensions (Unit:mm)



 $oldsymbol{1}$ 

### **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.



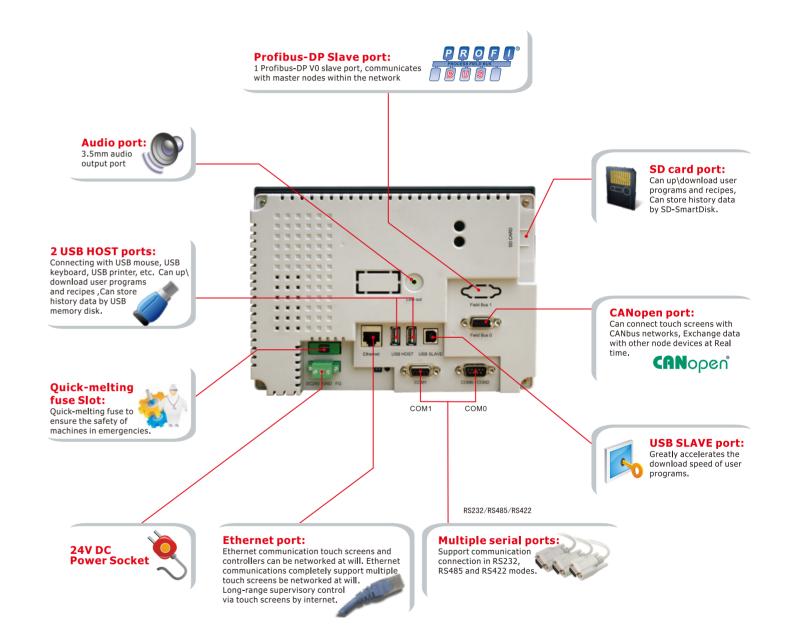
### **Hardware Description**

#### **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 processor;
- 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;
- > 10.4 above models support two-channel PAL 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, Via Kinco OPC software, user can realize factory automation network monitoring;
- 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, supports the import multiple windows image formats, such as BMP, JPG, GIF; supports all fonts of windows platform, supports 4 languages of interdace display;
- ➤ 3 COM ports, supports simutaneous communications with controllers of 3 different protocols, supports RS232/RS422/RS485 modes, supports exchange serial ports by software.

### MT5000 Series

### **Technical Specifications**





Model	MT5320C	MT5320C -DP	MT5320C -CAN	MT5320C -MPI	MT5323T	MT5323T -DP	MT5323T -CAN	MT5323 -MPI	
Performance specific	ation								
Display		5.6'	'TFT			5.7'	' TFT		
Resolution		320 × 23	34 pixels		640 × 480 pixels				
Color		65536	colors				colors		
Backlight	LED					L	ED		
Brightness	300cd/m <sup>2</sup>					7000	cd/m²		
Backlight life	50000 hr.					5000	00 hr.		
Touch Panel	4-w	4-wire precision resistance network				rire precision r	esistance net	work	
Processor		32-bit RISC	CPU 520MHz			32-bit RISC	CPU 520MHz		
Memory		8M FLASH+	16M SDRAM			16M FLASH-	+32M SDRAM		
Recipe memory & RTC		512KB	8 & RTC			512KE	3 & RTC		
Expandable memory		1 SD Card,	2 USB HOST			1 SD Card,	2 USB HOST		
Printer port			erial port				erial port		
Ethernet		10/100	) Base-T			10/100	) Base-T		
Audio interface			one				one		
Vedio interface		No	one			No	one		
Program download	1 USB S	LAVE port/Se	rial port/Ether	net port	1 USB S		rial port/Ether	net port	
COM port	COM0:RS232/RS485-2/RS485-4,					COM0:RS232/RS485-2/RS485-4,			
			/RS485-4, CO	•					
Expansion port	None	Profibus-DP		MPI	None	Profibus-DP		MPI	
Electrical specification									
Rated power	7.2 W					10	) W		
Rated voltage		DC	24V			DC	24V		
Input range			28VDC				28VDC		
Momentary power-off			Bms				Bms		
Insulation resistance	G		0MΩ@ 500V [	DC	G		0MΩ@ 500V [	DC	
Dielectric strength test			1 minute				1 minute	-	
Structure specification	on								
Shell color		Liaht	t-gray			Liaht	t-gray		
Shell material			BS		ABS				
Dimensions(mm)		204 × 1!	50 × 56.7		204 × 150 × 56.7				
Cutout size(mm)			× 138		192 × 138				
Weight		0.9	6kg		0.96kg				
Environment specific	ation				<u> </u>				
Operating temperature		0~4	45℃		-20~70℃				
Operating humidity		10~90% no	n-condensing		10~90% non-condensing				
Storage temperature		-30^	√80°C		-30~80°C				
Storage humidity	10~90% non-condensing			10~90% non-condensing					
Shockproof test	10~25Hz (X, Y, Z direction, 2G, 30 minutes)			10~25Hz (X, Y, Z direction, 2G, 30 minutes)					
Cooling method			air cooling	,	Natural air cooling				
Certification									
Degree of protection		IP65 (fro	ont panel)			IP65 (fro	ont panel)		
CE certification	Co		161000-6-2:20	05	Co		161000-6-2:20	05	
			4:2007standa				4:2007standa		
FCC compatibility			h FCC Class A				h FCC Class A		

15 . 16

### **MT5000 Series**

## **Technical Specifications**





Model	MT5423T	MT5423T -DP	MT5423T -CAN	MT5423T -MPI	MT5520T	MT5520T -DP	MT5520T -CAN	MT5520T -MPI		
Performance specific	ation									
Display		8''	TFT		10.4" TFT					
Resolution		800 × 60	00 pixels		640 × 480 pixels					
Color		65	536			65	536			
Backlight		LI	ED .			2 C	CFL			
Brightness		3000	cd/m²			4000	cd/m²			
Backlight life		5000	00 hr.			5000	00 hr.			
Touch Panel	4-w	ire precision r	esistance net	work	4-w	ire precision r	esistance net	work		
Processor		32-bit RISC	CPU 520MHz			32-bit RISC	CPU 520MHz			
Memory		16M FLASH-	-32M SDRAM			16M FLASH-	-32M SDRAM			
Recipe memory & RTC		512KB	& RTC			512KB	& RTC			
Expandable memory		1 SD Card,	2 USB HOST			1 SD Card,	2 USB HOST			
Printer port		USB/Se	rial port			USB/Se	rial port			
Ethernet		10/100	Base-T			10/100	Base-T			
Audio interface		1 Audio out	out interface			1 Audio out	put interface			
Vedio interface		No	ne			No	ne			
Program download	1 USB S	LAVE port/Se	rial port/Ether	net port	1 USB S	SLAVE port/Se	rial port/Ether	net port		
COM port	CC	OM0:RS232/RS	5485-2/RS485	-4,	COM0:RS232/RS485-2/RS485-4,					
	COM1:RS	232/RS485-2,	RS485-4, CO	M2:RS232	COM1:RS232/RS485-2/RS485-4, COM2					
Expansion port	None	Profibus-DP	CANopen	MPI	None	Profibus-DP	CANopen	MPI		
Electrical specification	n									
Rated power		8	W		12 W					
Rated voltage		DC	24V		DC24V					
Input range		12~2	8VDC		21~28VDC					
Momentary power-off			ms		<3ms					
Insulation resistance	G	reater than 50	OMΩ@ 500V [	OC .	Greater than 50MΩ@ 500V DC					
Dielectric strength test		500V AC	1 minute			500V AC	1 minute			
Structure specification	on									
Shell color		Light	-gray		Light-gray					
Shell material			BS		ABS					
Dimensions(mm)			72 × 57.9		310.6 × 230.6 × 55.7					
Cutout size(mm)			× 161		298 × 218					
Weight		1.2	7kg			2	kg			
Environment specific	ation									
Operating temperature			15℃		0~45℃					
Operating humidity			n-condensing		10~90% non-condensing					
Storage temperature		-10^	,60°C		-10~60℃					
Storage humidity			n-condensing		10~90% non-condensing					
Shockproof test	10~25H		ction, 2G, 30 i	minutes)	10~25Hz (X, Y, Z direction, 2G, 30 minutes)					
Cooling method		Natural a	ir cooling			Natural a	ir cooling			
Certification										
Degree of protection			nt panel)				nt panel)			
CE certification			61000-6-2:20		1	omply with EN				
	an		4:2007standa	rds	an	d EN61000-6-				
FCC compatibility		Complies wit	h FCC Class A			Complies wit	h FCC Class A			



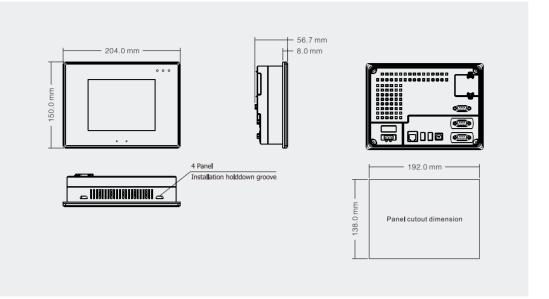


Model	MT5620T	MT5620T -DP	MT5620T -CAN	MT5620T -MPI	MT5720T	MT5720T -DP	MT5720T -CAN	MT5720T -MPI	
Performance specific	cation								
Display		12.1	" TFT		15" TFT				
Resolution		800 × 60	00 pixels		1024 × 768 pixels				
Color		65	536			65	536		
Backlight		2 C	CFL			2 C	CFL		
Brightness		2500	cd/m²			2500	cd/m²		
Backlight life		5000	00 hr.			5000	00 hr.		
Touch Panel	4-w	ire precision r	esistance net	work	4-w	ire precision r	esistance net	work	
Processor		32-bit RISC	CPU 520MHz			32-bit RISC	CPU 520MHz		
Memory		16M FLASH-	-32M SDRAM			16M FLASH-	+32M SDRAM		
Recipe memory & RTC		512KB	& RTC			512KE	8 & RTC		
Expandable memory		1 SD Card, 3	2 USB HOST			1 SD Card,	2 USB HOST		
Printer port		USB/Se	rial port			USB/Se	erial port		
Ethernet		10/100	Base-T			10/100	Base-T		
Audio interface		1 Audio out	put interface			1 Audio out	put interface		
Vedio interface	2 PAL sign	al video input	interface,BN0	Connector	2 PAL sign	al video input	interface,BNC	connector	
Program download	1 USB S	LAVE port/Se	rial port/Ethei	net port	t 1 USB SLAVE port/Serial port/Ethernet po				
COM port	cc	OM0:RS232/RS	5485-2/RS485	5-4,	COM0:RS232/RS485-2/RS485-4,				
	COM1:RS	COM1:RS232/RS485-2/RS485-4, COM2:RS232 COM1:RS232/RS485-2				2/RS485-4, COM2:RS232			
Expansion port	None	Profibus-DP	CANopen	MPI	None	Profibus-DP	CANopen	MPI	
<b>Electrical specification</b>	on								
Rated power		15.	6 W		16.8 W				
Rated voltage		DC	24V		DC24V				
Input range		21~2	8VDC		21~28VDC				
Momentary power-off		<3	Bms		<3ms				
Insulation resistance	G	reater than 50	OMΩ@ 500V [	OC .	Greater than 50MΩ@ 500V DC				
Dielectric strength test						500V AC	1 minute		
Structure specification	on								
Shell color		Bla	ack			Bl	ack		
Shell material		Me	etal		Metal				
Dimensions(mm)		350 × 26	54 × 48.7		406. 5 × 313. 5 × 48.3				
Cutout size(mm)		327	× 241			387.5	× 294.5		
Weight		4.3	3kg			5.	1kg		
Environment specific	ation								
Operating temperature		-10^	<b>√60</b> ℃			0~:	50℃		
Operating humidity		10∼90% noi	n-condensing		10~90% non-condensing				
Storage temperature		-20^	70℃		-20~60℃				
Storage humidity		10~90% noi	n-condensing		10~90% non-condensing				
Shockproof test	10~25Hz (X, Y, Z direction, 2G, 30 minutes)			10~25Hz (X, Y, Z direction, 2G, 30 minutes)					
Cooling method		Natural a	ir cooling			Natural a	air cooling		
Certification									
Degree of protection		IP65 (fro	nt panel)			IP65 (fro	ont panel)		
CE certification	Co	omply with EN	61000-6-2:20	005	Co	omply with EN61000-6-2:2005			
	an	d EN61000-6-	4:2007standa	ırds	an	d EN61000-6-	4:2007standa	rds	
FCC compatibility		Complies wit	h FCC Class A		Complies with FCC Class A				

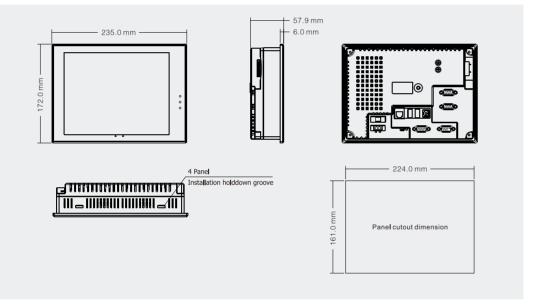
### Dimensions (Unit:mm)

MT5320C MT5320C-DP MT5320C-CAN MT5320C-MPI

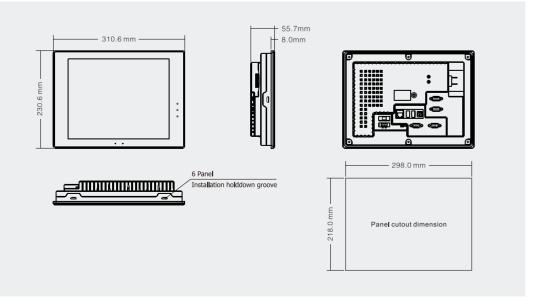
MT5323T MT5323T-DP MT5323T-CAN MT5323T-MPI



MT5423T MT5423T-DP MT5423T-CAN MT5423T-MPI

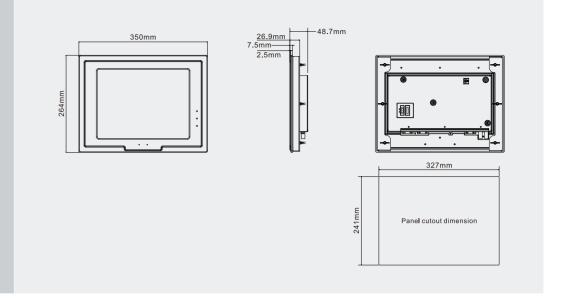


MT5520T MT5520T-DP MT5520T-CAN MT5520T-MPI

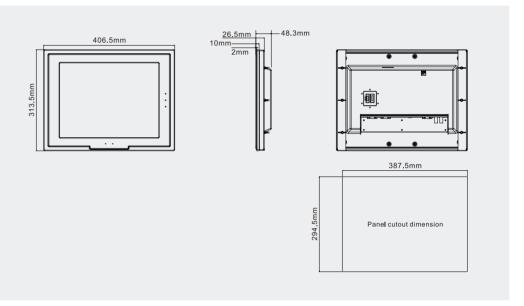


### Dimensions (Unit:mm)

MT5620T MT5620T-DP MT5620T-CAN MT5620T-MP1



MT5720T MT5720T-DP MT5720T-CAN MT5720T-MPI



### Software Description

Kinco HMIware is suitable for MT4000/MT5000 series HMIs.

#### **Operation window:**

A simple and practical platformfor project design and editing

- · Completing all functions from editing components library and simulation compilation, to download:
- Browse various project information and make better
- adjustment in time.

#### **Project file window**

All windows can be dragged freely,

Facilitate in modifying components library

- · Click an image library file, and the user can browse and edit the file:
- · Visual understanding of the HMI quantity used.

and a user can create individualized operation

interfaces according to his/her own habits.



Menu bar:

True color icon, visual and convenient navigation

- · Familiar icon style for most
- users, easy to use; · Simple and visual function.

#### Compilation information window

Display compilation progress After compilation display,

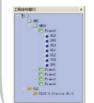


# De carp mag hall correct management MONON MILE PETRAGOT WESTON

#### Project structure window

Master the conditions of the entire project

Master the HMI, HMI components and PLC type used for the entire project.



### **Components library window**

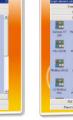
Five components libraries, meeting design requirements



Communication



Touch screen





PLC



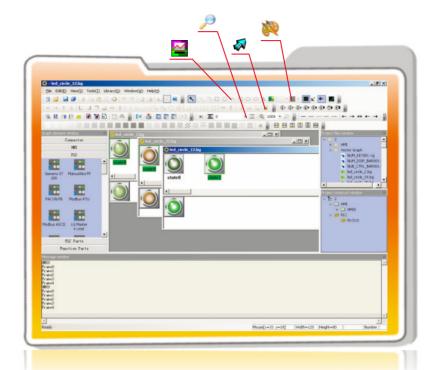




PLC components

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

#### Digital photos/Corporate logo import

The HMIware 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 Max.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 at any angle

Eight line width options

Three-level zoom-in/zoom-out display

Supporting drawing of various vector-based image

Wer-defined color filling in multiple modes

#### **Password protection**

16 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

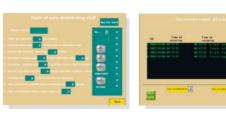
Any language supported by Windows can be displayed on the panel. The user can use up to 4 languages within a project, which makes it possible for global users to share their wisdom with their clients worldwide.



Bitmap 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

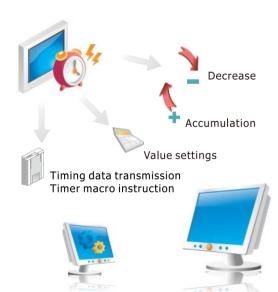
Most HMIs in the market use respectively defined script languages, lack of versatility, which are hard to learn since there is no sufficient reference resources, and furthermore they cannot be implanted into other HMI panels.

#### **Present**

The HMIware 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 HMIware.

Other configuration





HMIware configuration

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

#### **Powerful timer function**

- The timer of MT4000/MT5000 can implement the timing of a minimum of 100 ms, featuring accurate timing;
- Configured with multiple functions such as timed data transfer, value settings, accumulation, decrease, and timed macro instruction;
- Multiple 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 MT4000/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.

### **Provide Chinese Automation Solutions for Global Customers**



GEOTECH .....

**Kinco** 

**Strategic cooperation** 

Medical equipment Construction Machinery Construction tower crane .....