A comparison between the GREEN series and the MT4000 series

The first product of MT4000 series is listed in 2007. It has been over 10 years ago. More than a million products are sold to more than 40 countries and regions in the world. It serves many industries and has become a classic work based on the human machine interface of Linux platform. In the new era, we inherit the development experience of the more than 10 year professional human machine products and absorb the latest technological achievements of the semiconductor industry. Then we continue to innovate and launch a new generation of industrial human-machine interface - GREEN series.

The Green series is based on open Linux operating system and uses the CPU platform with over 10 years life cycle. After 1 recent year of market inspection at the user side, the products become more reliable,stable and have excellent performance, which is an ideal choice for seeking long-term stable and high quality human machine interface.

GREEN Serie	MT4000 Serie	Note
GH150E	MT4720TE	The 15"green series HMIs, which is the enhanced series, has more serial ports. Its installment size is different but hole dimension is same.
GH104E	MT4523TE	Same Hole size
GH070E	MT4424TE	Same Hole size
GH070	MT4404T	Same Hole size
GH043	MT4210T	Same Hole size
GH043E	MT4220TE	Same Hole size
G070	MT4414T	Same Hole size
G070E	MT4414TE	Same Hole size
G070E-CAN	MT4414TE-CAN	Same Hole size
GL150E		15'' Economic type
GL104E	MT4513TE	Same Hole size
GL100E	MT4532TE	Same Hole size
GL100	MT4532T	Same Hole size
GL070E	MT4434TE	Same Hole size
GL070	MT4434T	Same Hole size
GL043E	MT4230TE	Same Hole size
GI043	MT4230T	Same Hole size

Tips:
1.For new projects, Kinco strongly suggest our customers to choose the Green series products and don't suggest to choose the MT4000 series.
2.The old projects in MT4000 series products can be opened directly in DTools. After simulation, they can downloaded to corresponding new type HMIs

Kinco® Automation

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K1E20-1809

Kinco

HMI
Touch Screen

➡ **Kinco HMI Catalog**

- GREEN Series
- Customized Series

GREEN SERIES

Kinco

CONTENTS

* remarks: It is estimated that they will listing on the fourth quarter of 2018. Coming soon.

Concentrate on making good products and strive to create high quality human-machine interface.

The GREEN series is a new generation of industrial human machine interface. It adopts new architecture design, rigorous craft support, which makes it become paradigm in high-quality human machine interface. The GREEN series adopts mainstream processor in the market. Not only does it ensure the product's life time, but also greatly improves the performance of the product.

GREEN Series

Powerful hardware and software . More comprehensive upgrades

Structure	Material Science	Color	Kernel	CPU	Memory
New structure & exquisite body	Higher hardness and intensity; Higher temperature resistance	16770000 (24 bits) true color *15 inches remains unchanged.	Kernel, version upgrades, more stable performance	CPU, Freescale industrial class 792MHZ	The memory DDR3 is upgraded to 128M

KINCO new generation of industrial Human Machine interface

GREEN Series

The GREEN series products use the most advantageous ARM Cortex-A7 architecture industrial-grade processors, which ensure that HMIs efficiently work.

KINCO's smart factory, provides reliable guarantee for high-quality production in long-term.

GREEN Series Contains three sub series :

GH series

■ Enhanced Type

all models of 4.3"-17"

- Up to 4 serial ports (excluding 4.3") Ethernet,
- standard USB master port, slave port
- built-in isolation power, serial
  port isolation (Ethernet model)
- coating in mainboard

G series*

■ Standard Type

7",10"

- 3 serial port, Ethernet
- standard USB main port, slave port
- built-in isolation power supply

GL series

■ Economic Type

all models of 4.3"-15"

- 2 serial port
- Ethernet standard USB master
  port, slave port
  (excluding 4.3)

Configuration Software :

The GREEN series cooperates with new generation free configuration software: Kinco DTools. It supports four languages versions of Chinese, English, Korean and Russian. The configuration design content supports all fonts installed in computer system.
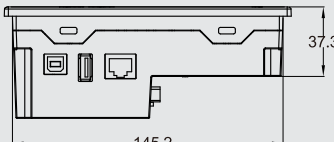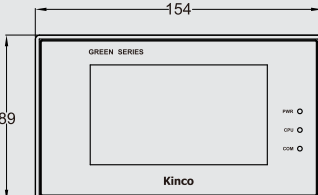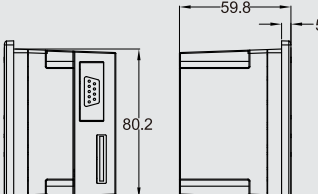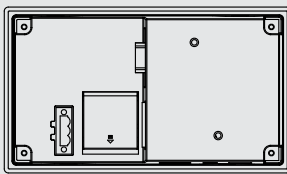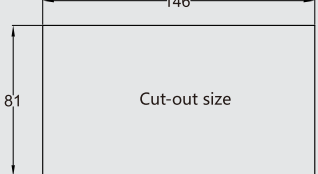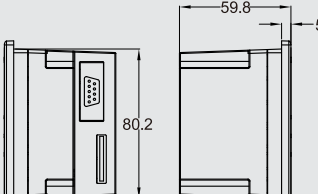
VNC achieves interoperation between HMI and HMI, HMI and PC, mobile phones (or other terminals), supports convenient components such as installment, PDF browsing and operating log records for designing guiding interface. It is the humanized design and easy to use.

* remarks: It is estimated that they will listing on the fourth quarter of 2018. Coming soon.

GH Series   4.3"

GH043/GH043E

- Preferred models for subway, high-speed railway and other rail transit
- Main board Three-denfence treatment to effectively deal with complex environment
- Built-in isolation power to enhance reliability
- Classic shape, hidden serial port out of line

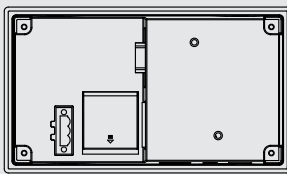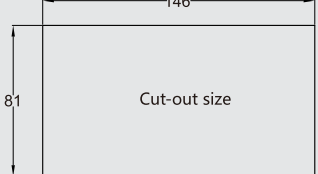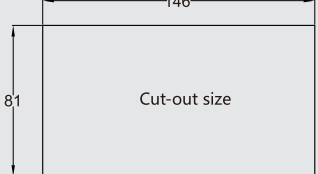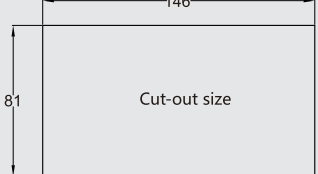| Model	GH043*	GH043E*
Performance specification		
Display size	4.3"TFT	
Display area	95.04mm(W)x53.86mm(H)	
Resolution	480*272 pixels	
display color	1677 color	
Display angle of view	70/70/50/70(left/right/up/down)	
contrast ratio	500:1	
Backlight	LED	
brightness	300cd/m2	
Backlight life	More than 30000 hours	
Touch panel	4 line precision resistance network (surface hardness 4H)	
CPU	ARM RISC 32Bit 792MHz	
storage	128MB NAND Flash Memory+128MB DDR3 Memory	
RTC	Built-in real time clock	
Extensible memory	USB Host	1 USB Host + 1 SD Card
Print port	USB Host/serial port	USB Host/serial port
Ethernet	None	10/100MHz self-adaption
Program download	USB Slave/U disk	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM2:RS232;	COM0:RS232/RS485/RS422; COM2:RS232;
Serial port isolation	None	None
Electrical specifications		
Input power supply	DC12V ~ DC28V,Built-in isolation power supply	
Power waste	3.5W @24V DC	
Allowable loss of power	<3ms	
Insulation resistance	Over 50MΩ@500V DC	
Hi-pot test	500 VAC 1 minute	
Structure specification		
Shell material	Engineering plastic	
Shape size	154mm*89mm*60mm	
Installation hole size	146mm*81mm	
Weight	0.4Kg	
Environmental specifications		
Temperature of Working environment	-10 ~ 55℃	
Humidity of working environment	10 ~ 90％RH（non-condensing）	
Storage environment temperature	-20 ~ 60℃	
Storage environment humidity	10 ~ 90％RH（non-condensing）	
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)	
Cooling mode	Natural air cooling	
Product certification		
Panel protection grade	Conforming to IP65 certification(4208—93)	
CE authentication	EN6100-6-4:2007+A1:2011,EN61000-6-2:2005	
Software		
configuration software	Kinco DTools V3.2 and above version	

Mechanical Dimensions (Unit : mm)

37.3
145.2
154
89
Kinco
59.8
5
80.2
146
81
Cut-out size

* remarks: It is estimated that they will listing on the fourth quarter of 2018. Coming soon.
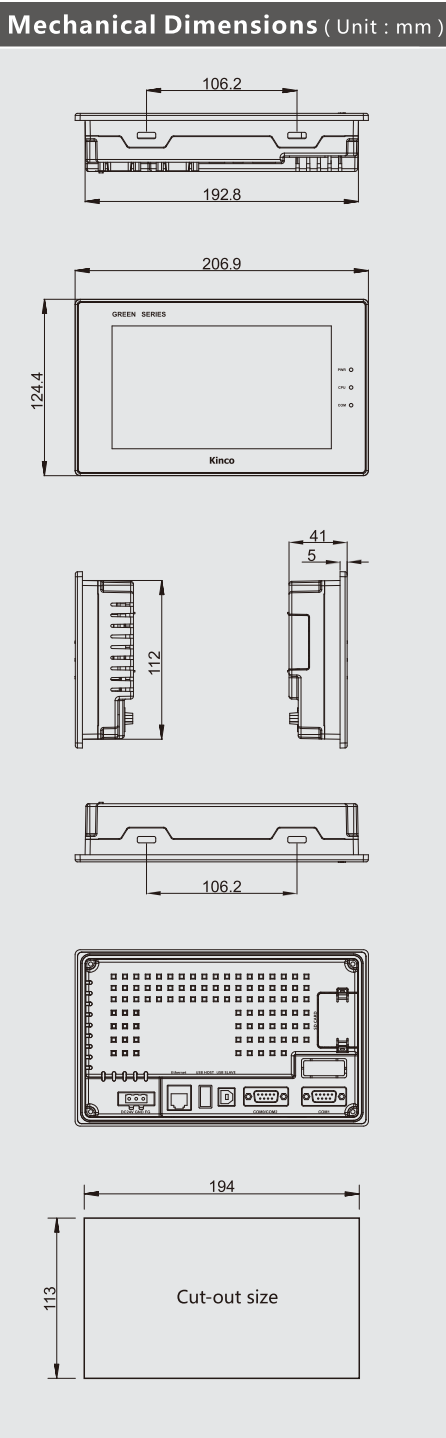
GH Series 7"

GH070/GH070E

- Suitable for high reliability expected situations
- Three anti - spraying + multiple isolation more reliable
- Up to four serial port +SD card expansion
- artistically ultra-narrow border

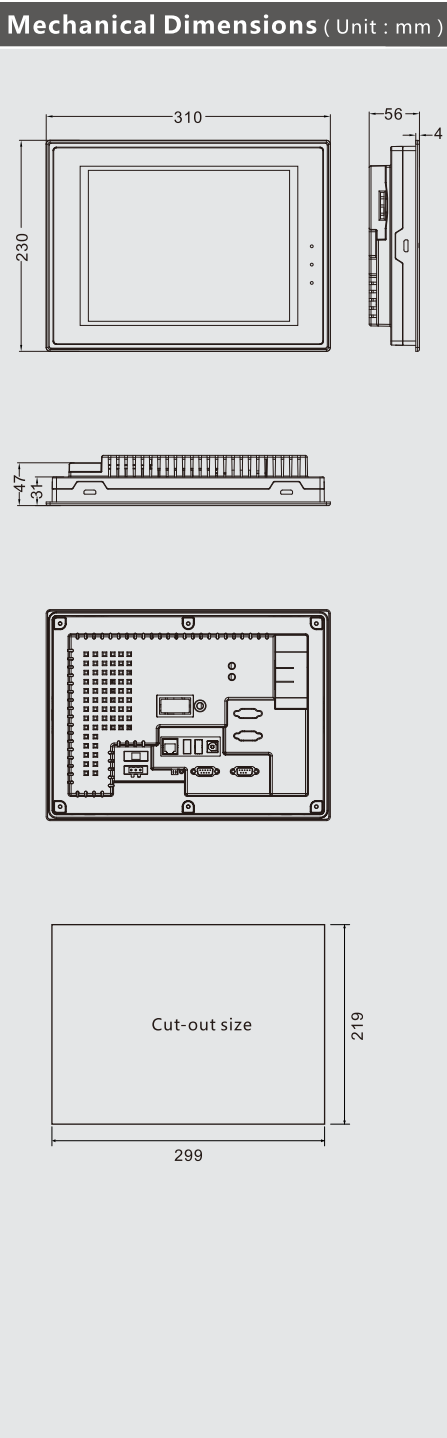| Model	GH070	GH070E
Performance specification		
Display size	7"TFT	
Display area	154.08mm(W)x85.92mm(H)	
Resolution	800*480 pixels	
display color	1677 color	
Display angle of view	70/70/50/70(left/right/up/down)	
contrast ratio	500:1	
Backlight	LED	
Brightness	400cd/m2	
Backlight life	30000 hrs	
Touch panel	4 line precision resistance network (surface hardness 4H)	
CPU	ARM RISC 32Bit 792MHz	
Storage	128MB NAND Flash Memory+128MB DDR3 Memory	
RTC	Built-in	
Extensible memory	1 USB Host	1 USB Host + 1 SD Card
Print port	USB Host/serial port	USB Host/serial port
Ethernet	None	10/100MHz self-adaption
Program download	USB Slave/U disk	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM2:RS232;	COM1:RS232/RS485/RS422; COM3:RS485;
Serial port isolation	None	Built-in
Electrical specifications		
Input power supply	DC12V~DC28V,Built-in isolation power supply	
Power waste	5W @24V DC	
Allowable loss of power	<3ms	
insulation resistance	Over 50MΩ@500V DC	
Hi-pot test	500 VAC 1 minute	
Structure specification		
Shell material	Engineering plastic	
Shape size	207mm*125mm*46mm	
Installation hole size	194mm*113mm	
Weight	0.6Kg	
Environmental specifications		
Temperature of Working environment	-10 ~ 55℃	
Humidity of working environment	10 ~ 90％RH（non-condensing）	
Storage environment temperature	-20 ~ 60℃	
Storage environment humidity	10 ~ 90％RH（non-condensing）	
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)	
Cooling mode	Natural air cooling	
Product certification		
Panel protection grade	Conforming to IP65 certification(4208—93)	
CE authentication	EN6100-6-4:2007+A1:2011,EN61000-6-2:2005	
Software		
configuration software	Kinco DTools V3.2 and above version	

Mechanical Dimensions (Unit : mm)

* remark: GH070 can replace MT4404T; GH070E can replace MT4424TE.
(Old version projects can be simulated in DTools and download to Green series's HMI)

GH Series 10.4"

GH104E

- Suitable for high reliability expected situations
- Three anti - spraying + multiple isolation more reliable
- Up to four serial port +SD card expansion
- industrial size 4:3,display area is 20% higher than the widescreen

Model	GH104E*
Performance specification	
Display size	10.4"TFT
Display area	211.20mm(W)x158.40mm(H)
Resolution	800*600 pixel
display color	1677 color
Display angle of view	70/70/60/70(left/right/up/down)
contrast ratio	500:1
Backlight	LED
Brightness	350cd/m2
Backlight life	30000 hrs
Touch panel	4 line precision resistance network (surface hardness 4H)
CPU	ARM RISC 32Bit 792MHz
Storage	128MB NAND Flash Memory+128MB DDR3 Memory
RTC	Built-in
Extensible memory	1 USB Host + 1 SD Card
Print port	USB Host/serial port
Ethernet	10/100MHz self-adaption
Program download	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM1: RS232/RS485/RS422; COM2:RS232; COM3: RS485;
Serial port isolation	Built-in
Electrical specifications	
Input power supply	DC12V ~ DC28V,Built-in isolation power supply
Power waste	TBD
Allowable loss of power	<3ms
insulation resistance	Over 50MΩ@500V DC
Hi-pot test	500 VAC 1 minute
Structure specification	
Shell material	Engineering plastic
Shape size	310mm*230mm*56mm
Installation hole size	299mm*219mm
Weight	TBD
Environmental specifications	
Temperature of Working environment	-10 ~ 55℃
Humidity of working environment	10 ~ 90％RH（non-condensing）
Storage environment temperature	-20 ~ 60℃
Storage environment humidity	10 ~ 90％RH（non-condensing）
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)
Cooling mode	Natural air cooling
Product certification	
Panel protection grade	Conforming to IP65 certification(4208—93)
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005
Software	
configuration software	Kinco DTools V3.2 and above version

Mechanical Dimensions (Unit : mm)

* remarks: It is estimated that they will listing on the fourth quarter of 2018. Coming soon.

GH Series — 15"

GH150E

• It is suitable for high reliability expected situations
• Three anti - spraying + multiple isolation more reliable
• Up to four serial port +SD card expansion
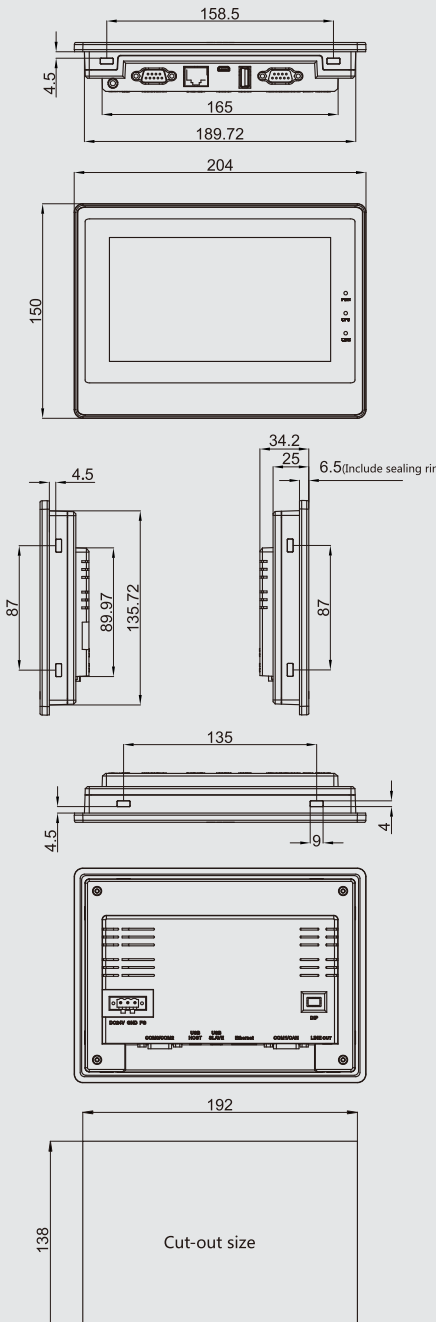• Fashion design, graceful and decent

Model	GH150E
Performance specification	
Display size	15"TFT
Display area	304.13mm(W)x228.10mm(H)
Resolution	1024*768 pixel
display color	65536 color
Display angle of view	80/80/80/80(left/right/up/down)
contrast ratio	800:1
Backlight	LED
Brightness	420cd/m2
Backlight life	50000 hours
Touch panel	4 line precision resistance network (surface hardness 4H)
CPU	ARM RISC 32Bit 792MHz
Storage	128MB NAND Flash Memory+128MB DDR3 Memory
RTC	Built-in real time clock
Extensible memory	1 USB Host +1 SD card
Print port	USB Host/serial port
Ethernet	10/100MHz self-adaption
Program download	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM1:RS232/RS485/RS422; COM2:RS232; COM3:RS485;
Serial port isolation	Built-in
Electrical specifications	
Input power supply	DC21V ~ DC28V,Built-in isolation power supply
Power waste	16W
Allowable loss of power	<3ms
insulation resistance	Over 50MΩ@500V DC
Hi-pot test	500 VAC 1 minute
Structure specification	
Shell material	Engineering plastic
Shape size	398mm*298mm*47mm
Installation hole size	383mm*283mm
Weight	3Kg
Environmental specifications	
Temperature of Working environment	-10 ~ 55℃
Humidity of working environment	10 ~ 90％RH（non-condensing）
Storage environment temperature	-20 ~ 60℃
Storage environment humidity	10 ~ 90％RH（non-condensing）
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)
Cooling mode	Natural air cooling
Product certification	
Panel protection grade	Conforming to IP65 certification(4208—93)
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005
Software	
configuration software	Kinco DTools V3.2 and above version

Mechanical Dimensions (Unit : mm)

269 / 382 / 398 / 298 / 47 / 30 / 7 (Include sealing ring) / 189 / 282 / 189 / 229 / 383 / 283

Cut-out size

* remark: GH150E can replace MT4720TE.(Old version projects can be simulated in DTools and download to Green series's HMI)

G Series — 7"

G070/G070E/G070E-CAN

• Built-in isolation power to enhance reliability
• High brightness liquid crystal provide better display effect
• CAN port is supported
• Three series ports meet diverse needs

Model	G070*	G070E*	G070E-CAN*
Performance specification			
Display size	7"TFT		
Display area	154.08mm(W)x85.92mm(H)		
Resolution	800*480 pixel		
display color	1677 color		
Display angle of view	70/70/60/70(left/right/up/down) RDH10		
contrast ratio	500:1		
Backlight	LED		
Brightness	400cd/m2		
Backlight life	More than 30000 hours		
Touch panel	4 line precision resistance network (surface hardness 4H)		
CPU	ARM RISC 32Bit 792MHz		
Storage	128MB NAND Flash Memory+128MB DDR3 Memory		
RTC	Built-in		
Extensible memory	1 USB Host		
Print port	USB Host/serial port		
Ethernet	None	10/100MHz self-adaption	10/100MHz self-adaption
Bus interface	None	None	1*CANopen
Program download	USB Slave /U disk	USB Slave /U disk/Ethernet	USB Slave /U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM1:RS485;COM2:RS232;		
Electrical specifications			
Input power supply	DC12V ~ DC28V,Built-in isolation power supply		
Power waste	TBD		
Allowable loss of power	<3ms		
insulation resistance	Over 50MΩ@500V DC		
Hi-pot test	500 VAC 1 minute		
Structure specification			
Shell material	Engineering plastic		
Shape size	204mm*150mm*34mm		
Installation hole size	192mm*138mm		
Weight	0.5Kg		
Environmental specifications			
Temperature of Working environment	0 ~ 50℃		
Humidity of working environment	10 ~ 90％RH（non-condensing）		
Storage environment temperature	-20 ~ 60℃		
Storage environment humidity	10 ~ 90％RH（non-condensing）		
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)		
Cooling mode	Natural air cooling		
Product certification			
Panel protection grade	Conforming to IP65 certification(4208—93)		
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005		
Software			
configuration software	Kinco DTools V3.2 and above version		

Mechanical Dimensions (Unit : mm)

158.5 / 4.5 / 165 / 189.72 / 204 / 150 / 34.2 / 25 / 6.5(Include sealing ring) / 4.5 / 87 / 89.97 / 135.72 / 87 / 135 / 4.5 / 9 / 4 / 192 / 138

Cut-out size

* remarks: It is estimated that they will listing on the fourth quarter of 2018. Coming soon.

GL Series 4.3″

GL043/GL043E

• Suitable for small space occasions
•Beautiful appearance, ultra-thin body
•High cost-effective

Mechanical Dimensions (Unit : mm)

Model	GL043	GL043E
Performance specification		
Display size	4.3"TFT	
Display area	95.04mm(W)x53.86mm(H)	
Resolution	480*272 pixels	
display color	1677 color	
Display angle of view	70/70/50/70(left/right/up/down)	
contrast ratio	500:1	
Backlight	LED	
Brightness	450cd/m2	
Backlight life	30000 hrs	
Touch panel	4 line precision resistance network (surface hardness 4H)	
CPU	ARM RISC 32Bit 792MHz	
Storage	128MB NAND Flash Memory+128MB DDR3 Memory	
RTC	Built-in real time clock	
Extensible memory	None	
Print port	Series port	
Ethernet	None	10/100MHz self-adaption
Program download	USB Slave/U disk	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM2:RS232;	
Electrical specifications		
Input power supply	DC10V ~ DC28V	
Power waste	2W @24V DC	
Allowable loss of power	<3ms	
insulation resistance	Over 50MΩ@500V DC	
Hi-pot test	500 VAC 1 minute	
Structure specification		
Shell material	Engineering plastic	
Shape size	132mm*102mm*33mm	
Installation hole size	119mm*93mm	
Weight	0.21Kg	
Environmental specifications		
Temperature of Working environment	0 ~ 50℃	
Humidity of working environment	10 ~ 90%RH（non-condensing）	
Storage environment temperature	-20 ~ 60℃	
Storage environment humidity	10 ~ 90%RH（non-condensing）	
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)	
Cooling mode	Natural air cooling	
Product certification		
Panel protection grade	Conforming to IP65 certification(4208—93)	
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005	
Software		
configuration software	Kinco DTools V3.2 and above version	

117.5

132

102

91.5

33 5.7(Include sealing ring)

119

93 Cut-out size

* remark: GL043 can replace MT4230T; GL043E can replace MT4230TE.
(Old version projects can be simulated in DTools and download to Green series's HMI)
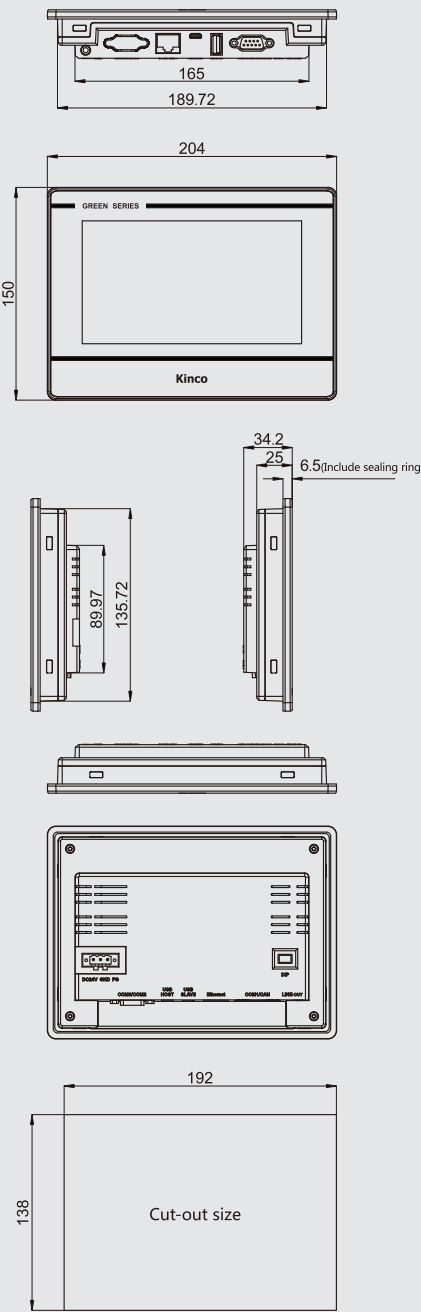

GL Series 7″

GL070/GL070E

• Preferred model for general use
• A non-hollow mask is more effective against oil pollution
• Beautiful appearance, ultra-thin body
• High cost-effective

Mechanical Dimensions (Unit : mm)

Model	GL070	GL070E
Performance specification		
Display size	7"TFT	
Display area	154.08mm(W)x85.92mm(H)	
Resolution	800*480 pixel	
Display color	1677 color	
Display angle of view	70/70/50/70(left/right/up/down)	
Contrast ratio	500:1	
Backlight	LED	
brightness	250cd/m2	
Backlight life	30000 hrs	
Touch panel	4 line precision resistance network (surface hardness 4H)	
CPU	ARM RISC 32Bit 792MHz	
Storage	128MB NAND Flash Memory+128MB DDR3 Memory	
RTC	Built-in	
Extensible memory	1 USB Host	
Print port	USB Host/serial port	
Ethernet	None	10/100MHz self-adaption
Program download	USB Slave/U disk	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM2:RS232;	
Electrical specifications		
Input power supply	DC10V ~ DC28V	
Power waste	3.6W @24V DC	
Allowable loss of power	<3ms	
insulation resistance	Over 50MΩ@500V DC	
Hi-pot test	500 VAC 1 minute	
Structure specification		
Shell material	Engineering plastic	
Shape size	204mm*150mm*34mm	
Installation hole size	192mm*138mm	
Weight	0.5Kg	
Environmental specifications		
Temperature of Working environment	0 ~ 50℃	
Humidity of working environment	10 ~ 90%RH（non-condensing）	
Storage environment temperature	-20 ~ 60℃	
Storage environment humidity	10 ~ 90%RH（non-condensing）	
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)	
Cooling mode	Natural air cooling	
Product certification		
Panel protection grade	Conforming to IP65 certification(4208—93)	
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005	
Software		
configuration software	Kinco DTools V3.2 and above version	

165
189.72

204

150

34.2
25 6.5(Include sealing ring)
89.97
135.72

192

138 Cut-out size

* remark: GL070 can replace MT4434T; GL070E can replace MT4434TE.
(Old version projects can be simulated in DTools and download to Green series's HMI)
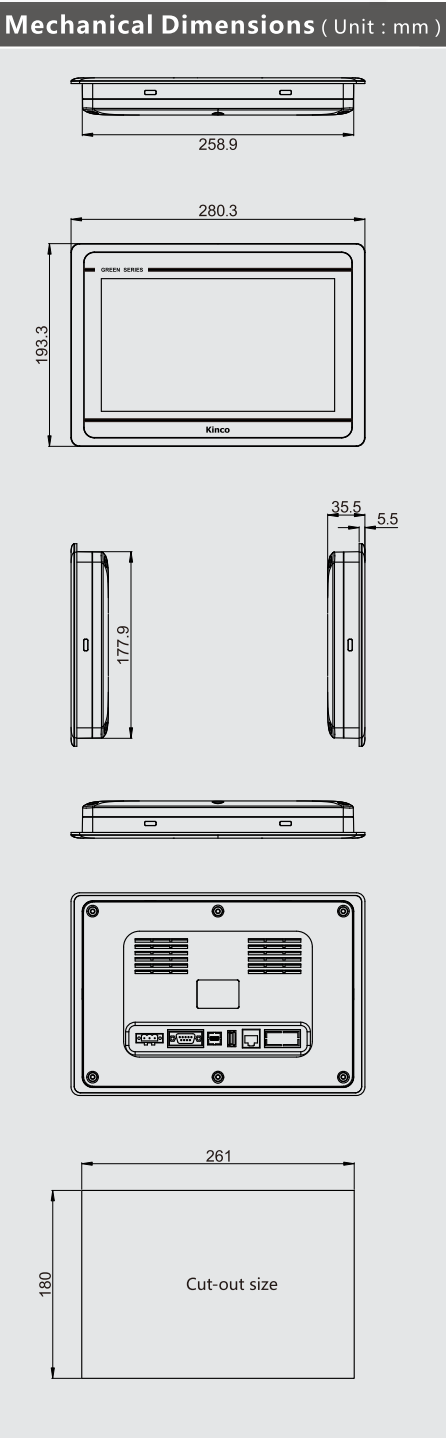
GL Series 10.1"

GL100/GL100E

- Preferred model for general use in 10 inch screen
- A non-hollow mask is more effective against oil pollution
- Beautiful appearance, ultra-thin body
- High cost-effective

GL Series 10.4"

GL104E

- Built-in isolated power supply to enhance reliability
- Industrial size 4:3,possessing greatful visual coordination
- Firm structure
- High cost-effective

Model	GL100	GL100E
Performance specification		
Display size	10.1"TFT	
Display area	222.72mm(W)x125.28mm(H)	
Resolution	1024*600 pixels	
Display color	1677 color	
Display angle of view	70/70/60/70(left/right/up/down)	
Contrast ratio	500:1	
Backlight	LED	
Brightness	400cd/m2	
Backlight life	More than 30000 hours	
Touch panel	4 line precision resistance network (surface hardness 4H)	
CPU	ARM RISC 32Bit 792MHz	
storage	128MB NAND Flash Memory+128MB DDR3 Memory	
RTC	Built-in real time clock	
Extensible memory	1 USB Host	
Print port	USB Host/serial port	
Ethernet	None	10/100MHz self-adaption
Program download	USB Slave/U disk	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM2:RS232;	
Electrical specifications		
Input power supply	DC10V ~ DC28V	
Power waste	6W @24V DC	
Allowable loss of power	<3ms	
insulation resistance	Over 50MΩ@500V DC	
Hi-pot test	500 VAC 1 minute	
Structure specification		
Shell material	Engineering plastic	
Shape size	280mm*193mm*36mm	
Installation hole size	261mm*180mm	
Weight	0.9Kg	
Environmental specifications		
Temperature of Working environment	0 ~ 50℃	
Humidity of working environment	10 ~ 90%RH（non-condensing）	
Storage environment temperature	-20 ~ 60℃	
Storage environment humidity	10 ~ 90%RH（non-condensing）	
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)	
Cooling mode	Natural air cooling	
Product certification		
Panel protection grade	Conforming to IP65 certification(4208—93)	
CE authentication	EN6100-6-4:20072011,EN61000-6-2:2005	
Software		
configuration software	Kinco DTools V3.2 and above version	

Mechanical Dimensions (Unit : mm)

258.9
280.3
193.3
35.5
5.5
177.9
261
180
Cut-out size

Model	GL104E*
Performance specification	
Display size	10.4"TFT
Display area	211.20mm(W)x158.40mm(H)
Resolution	800*600 pixel
Display color	1677 color
Display angle of view	70/70/60/70(left/right/up/down)
Contrast ratio	500:1
Backlight	LED
Brightness	350cd/m2
Backlight life	30000 hours
Touch panel	4 line precision resistance network (surface hardness 4H)
CPU	ARM RISC 32Bit 792 MHz
storage	128MB NAND Flash Memory+128MB DDR3 Memory
RTC	Built-in real time clock
Extensible memory	1 USB Host
Print port	USB Host/serial port
Ethernet	10/100MHz self-adaption
Program download	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM2:RS232;
Electrical specifications	
Input power supply	DC21V ~ DC28V,Built-in isolation power supply
Power waste	TBD
Allowable loss of power	<3ms
insulation resistance	Over 50MΩ@500V DC
Hi-pot test	500 VAC 1 minute
Structure specification	
Shell material	Engineering plastic
Shape size	310mm*230mm*56mm
Installation hole size	299mm*219mm
Weight	TBD
Environmental specifications	
Temperature of Working environment	0 ~ 50℃
Humidity of working environment	10 ~ 90%RH（non-condensing）
Storage environment temperature	-20 ~ 60℃
Storage environment humidity	10 ~ 90%RH（non-condensing）
Anti-seismic degree	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)
Cooling mode	Natural air cooling
Product certification	
Panel protection grade	Conforming to IP65 certification(4208—93)
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005
Software	
configuration software	Kinco DTools V3.2 and above version

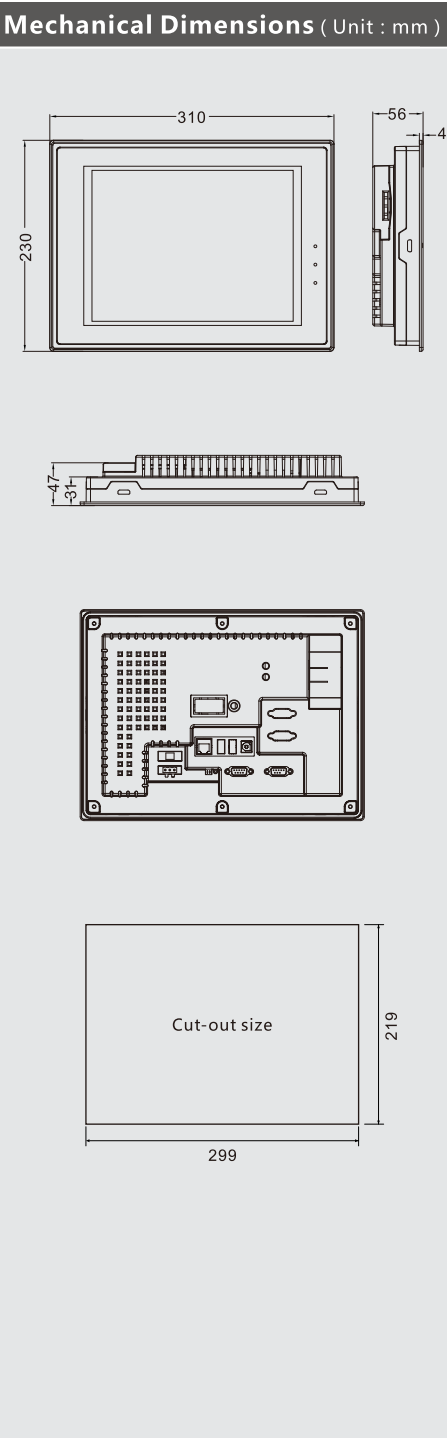**Mechanical Dimensions** (Unit : mm)

310
56
4
230
47
Cut-out size
299
219

* remark: GH100 can replace MT4532T; GH100E can replace MT4532TE.
(Old version projects can be simulated in DTools and download to Green series's HMI)

* remarks: It is estimated that they will listing on the fourth quarter of 2018. Coming soon.

GL Series 15"

GL150E

- Preferred model for general use in 15 inch screen
- Built-in isolated power supply to enhance reliability
- Industrial size 4:3,possessing greatful visual coordination
- Firm structure

Model	GL150E
Performance specification	
Display size	15"TFT
Display area	304.13mm(W)x228.10mm(H)
Resolution	1024*768 pixel
Display color	65536 color
Display angle of view	80/80/80/80(left/right/up/down)
Contrast ratio	800:1
Backlight	LED
Brightness	420cd/m2
Backlight life	50000 hours
Touch panel	4 line precision resistance network (surface hardness 4H)
CPU	ARM RISC 32Bit 792MHz
storage	128MB NAND Flash Memory+128MB DDR3 Memory
RTC	Built-in real time clock
Extensible memory	1 USB Host
Print port	USB Host/serial port
Ethernet	10/100MHz self-adaption
Program download	USB Slave/U disk/Ethernet
Communication port	COM0:RS232/RS485/RS422; COM2:RS232;;
Electrical specifications	
Input power supply	DC21V～DC28V
Power waste	16W@24V DC
Allowable loss of power	<3ms
insulation resistance	Over 50MΩ@500V DC
Hi-pot test	500 VAC 1 minute
Structure specification	
Shell material	Engineering plastic
Shape size	398mm*298mm*47mm
Installation hole size	383mm*283mm
Weight	3Kg
Environmental specifications	
Temperature of Working environment	-10～55℃
Humidity of working environment	10～90%RH（non-condensing）
Storage environment temperature	-20～60℃
Storage environment humidity	10～90%RH（non-condensing）
Anti-seismic degree	10～500Hz (X、Y、Z direction 2G/30 minute)
Cooling mode	Natural air cooling
Product certification	
Panel protection grade	Conforming to IP65 certification(4208—93)
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005
Software	
configuration software	Kinco DTools V3.2 and above version

Mechanical Dimensions (Unit : mm)

269
382
398
298
47
30
7(Include sealing ring)
189
282
189
229
383
283
Cut-out size

SZ7 Series handheld terminal

- Series:SZ7(kinco HMIWare software),SZ7(WinCE)
- Remote control:with hand-held terminal,support 5m/10m/15m long distance operation.
- Easy for installation:support FDMI standard(75 * 75mm)bracket or rack installation.

Model	SZ7	SZ7S	SZ7E	SZ7ES
Performance specification				
Display size	7"TFT			
Resolution	800*480 pixels			
Display color	65536 color			
Brightness	250cd/m2			
Backlight	LED			
Touch panel	4 line precision resistance network (surface hardness 4H)			
Backlight life	50000 hours			
programable button	1		10	
programable LED	2		2	
Emergency button	1		1	
Selection Switch	1		1	
Dead-man switch	None	1	None	1
processor	800MHz RISC			
Memory	128MB Flash +64MB RAM			
Recipe memory&RTC	256KB + RTC			
Expandable memory	1 USB Host			
Series port	1*RS485-2,RS232		Rs232	
Ethernet	None		1*10M/100M self-adaptive	
Program download	RS232,USB Host		RS232,USB Host,Ethernet	
COM port	RS485-2,RS232		RS232,Ethernet	
Electrical specifications				
Power supply isolation	Built-in			
Rated power	8W			
Rated voltage	DC24V			
Input range	16～32V DC			
Power down allowed	<3ms			
Insulation resistance	Over 50MΩ@500V DC			
Dielectric strength test	500V AC 1 minute			
Cable length	5 m			
Structure specification				
Shell color	Black			
Shell material	Engineering plastic			
Dimensions	220*156*45 mm			
Installation	Bracket mounting,suspension mounting			
Environmental specifications				
Operating temperature	0～50℃			
Operating humidity	10～90%RH（non-condensing）			
Storage temperature	-10～60℃			
Storage humidity	10～90%RH（non-condensing）			
shockproof test	10～500Hz (X、Y、Z direction 2G/30 minute)			
Cooling mode	Natural air cooling			
Product certification				
Degree of protection	Front panel IP65,overall unit IP62			
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005			
Software				
configuration software	Kinco HMIware V2.5			

Mechanical Dimensions Unit : mm

220
156
79.1
64.8
45
75
75
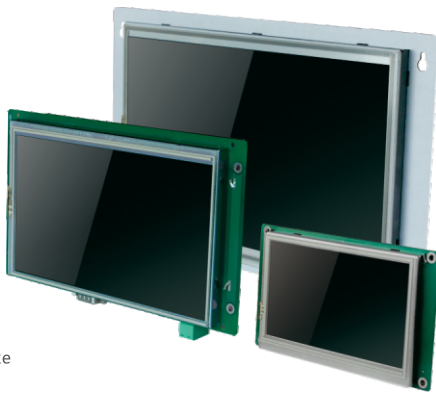
Kinco MT4000R series
Embedded HMI (no front and back shell)
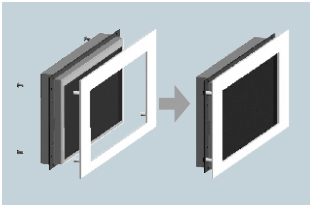
- R series includes 5 types: MT4043R, MT4070R, MT4070ER, MT4100R, MT4100ER;
- R series's USB slave use MicroUSB port;
- ER are the products with Ethernet port, COM1 (RS485-2W) is terminal type;
- R series use rear mounting method, which can make HMI perfectly fix with device interface and integrate with device.
- Depend on requirements, customers can design mask, which make device looks more luxurious.
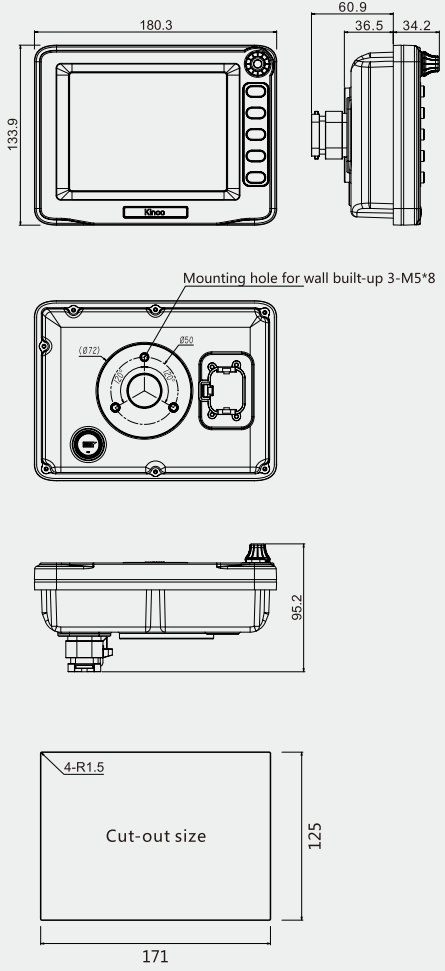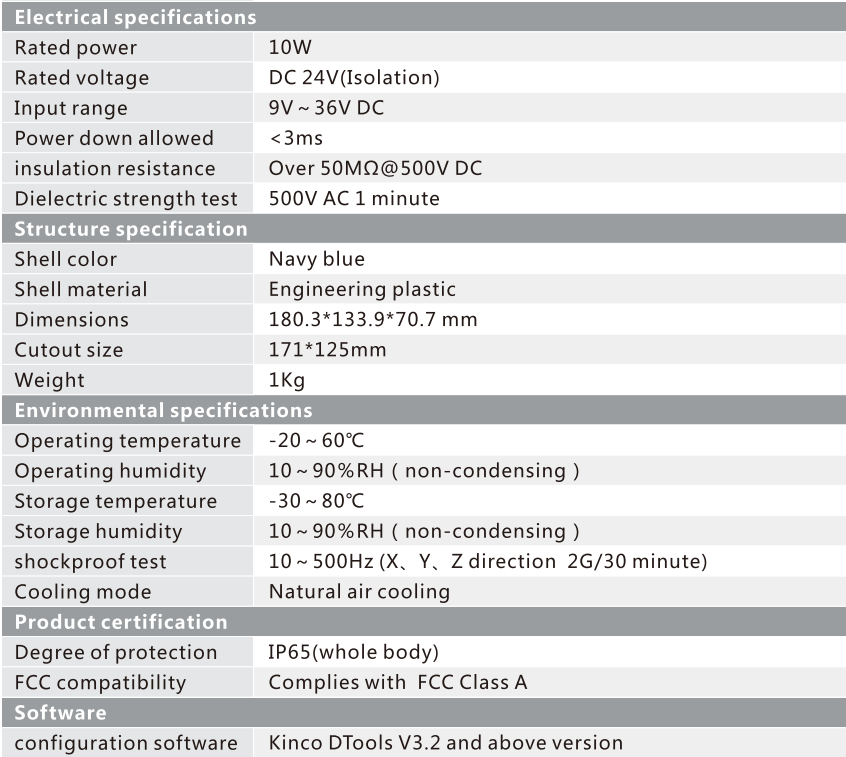
Model	MT4043R	MT4070R	MT4070ER	MT4100R	MT4100ER
Performance specification					
display size	4.3" TFT	7" TFT		10.1" TFT	
resolution	480*272 pixel	800*480 pixel		1024*600 pixel	
display color	65536color	65536color		65536color	
brightness	250cd/m^2	250cd/m^2		200cd/m^2	
Backlight	LED				
Touch panel	4 line precision resistance network (surface hardness 4H)				
Backlight life	50000 hours				
processor	800MHz RISC				
Memory	128MB Flash +64MB DDR2				
Recipe memory&RTC	256KB + RTC				
Expandable memory	1 USB Host(≤16G)	1 USB Host(≤16G) 1SD card(≤16G only ER support)		1 USB Host(≤16G) 1SD card(≤16G only ER support)	
Print port	USB Slave/Serial port	USB Slave/Serial port		USB Slave/Serial port	
Ethernet	None	None	10/100M self-adaptive	None	10/100M self-adaptive
Program download	USB/Serial port	USB/Serial port	USB/Serial port/Ethernet	USB/Serial port	USB/Serial port/Ethernet
COM port	COM0:RS485-2W/4W,RS232; COM2:RS232;	COM0:RS485-2W/4W,RS232; COM1:RS485-2W (only ER support); COM2:RS232;		COM0:RS485-2W/4W,RS232; COM1:RS485-2W (only ER support) ; COM2:RS232;	
Electrical specification					
Rated power	2.4W	5W		5.5W	
Rated voltage	DC24V	DC24V		DC24V	
Input range	12 ~ 28V DC	12 ~ 28V DC		12 ~ 28V DC	
Power down allowed	<3ms	<3ms		<3ms	
Insulation resistance	Over 50MΩ@500V DC	Over 50MΩ@500V DC		Over 50MΩ@500V DC	
Dielectric strength test	500V AC 1 minute	500V AC 1 minute		500V AC 1 minute	
Structure specification					
Shell color	-	-		Grey	
Shell material	Mental	Mental		Mental	
Dimensions	128*75*27 mm	190.4*110*30 mm		275.6*163.6*32 mm	
Cutout size	107.2*68.9 mm	166*101 mm		238*148 mm	
Weight	0.2Kg	0.3Kg		0.9Kg	
Environmental specifications					
Operating temperature	0 ~ 50℃				
Operating humidity	10 ~ 90%RH (non-condensing)				
Storage temperature	-10 ~ 60℃				
Storage humidity	10 ~ 90%RH (non-condensing)				
shockproof test	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)				
Cooling mode	Natural air cooling				
Product certification					
Degree of protection	IP65(4208--93)				
CE authentication	EN6100-6-4:2007,EN61000-6-2:2005				
FCC compatibility	Complies with FCC Class A				
Software					
configuration software	Kinco HMIware V2.5				

Kinco CZ6
Design for severe environment only

- Outer shell use high thermostability,high intensity,anti-uvioresistant material ensure the best performance when HMI working in the severe environment.
- With wide range temperature LCD,working temperature can be -20℃ - 60℃.
- Highly shockproof performance.
- Multiple serial ports,CAN port,support CANopen/CANJ1939/serials port/RS232/RS485.
- Whole body IP65 protection.

Model	CZ6
Performance specification	
Display	5.7"TFT
Resolution	640*480 pixels
Color	65536 color
Brightness	700cd/m2
Backlight	LED
Backlight life	50000 hrs
Processor	RISC Cortex-A8 800MHz
Memory	256MB Flash + 256MB DDR3
Recipe memory&RTC	32KB + RTC
Expandable memory	1 USB Host
Print port	USB/serial port
Ethernet	None
Program download	1*USB 2.0/Serial port
COM port	COMO:RS485,COM2:RS232 1 CANport
Extended interface	None
Electrical specifications	
Rated power	10W
Rated voltage	DC 24V(Isolation)
Input range	9V ~ 36V DC
Power down allowed	<3ms
insulation resistance	Over 50MΩ@500V DC
Dielectric strength test	500V AC 1 minute
Structure specification	
Shell color	Navy blue
Shell material	Engineering plastic
Dimensions	180.3*133.9*70.7 mm
Cutout size	171*125mm
Weight	1Kg
Environmental specifications	
Operating temperature	-20 ~ 60℃
Operating humidity	10 ~ 90%RH (non-condensing)
Storage temperature	-30 ~ 80℃
Storage humidity	10 ~ 90%RH (non-condensing)
shockproof test	10 ~ 500Hz (X、Y、Z direction 2G/30 minute)
Cooling mode	Natural air cooling
Product certification	
Degree of protection	IP65(whole body)
FCC compatibility	Complies with FCC Class A
Software	
configuration software	Kinco DTools V3.2 and above version

Mechanical Dimensions Unit : mm

180.3 60.9 36.5 34.2 133.9

Mounting hole for wall built-up 3-M5*8
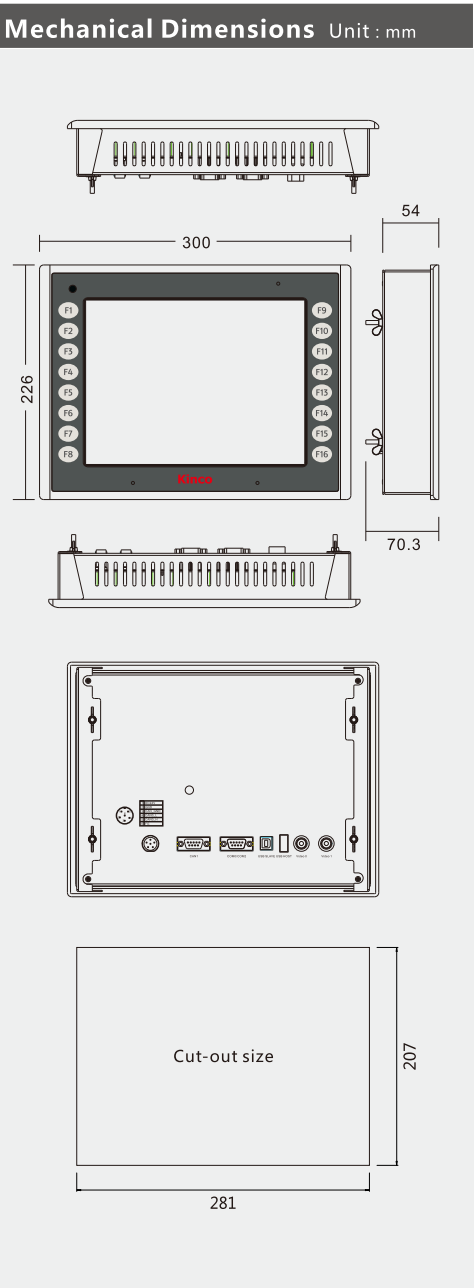
95.2

4-R1.5 Cut-out size 125 171

Kinco CZ10
Customized HMI-for vehicle

- RISC Cortex-A8 800MHz professional CPU.
- Larger storage space,256MB Flash+ 256MB DDR3
- With two serials port expandable,support RS232/RS485/RS422.
- With two video input
- Back-lighting keyboard,easy for night operation.
- With wide range temperature LCD,working temperature can be -20℃~60℃,high
  brightness,full-view,sunlight Readable.
- With full item metal outer shell,with best cooling and shockproof performance,
- With isolated power supply design,suppress interference to ensure the best working performance.

Model	CZ10
Performance specification	
Display	10.4"TFT
Resolution	640*480 pixel
Color	65536 color
Brightness	500cd/m2
Backlight	LED
Backlight life	50000 hrs
Touch panel	None
Funtion keys	16 keys,programmable functions can be customized
Processor	RISC Cortex-A8 800MHz
Memory	256MB Flash + 256MB RAM
Recipe memory&RTC	32KB + RTC
Expandable memory	1 USB Host (≤16G)
Print port	USB Host/Slave/serial port
Program download	1*USB 2.0/Serial port
COM port	"2*CAN,1*RS232/RS485/RS422,1*RS232(isolation) "
Video input	2*CVBS analog signal input(BNC connector),support PAL/NTSC interface
Electrical specifications	
Power supply isolation	Built-in
Rated power	12W
Rated voltage	DC 24V
Input range	9V~36V DC
Power down allowed	<3ms
insulation resistance	Over 50MΩ@500V DC
Dielectric strength test	500V AC 1 minute
Structure specification	
Shell color	Brown
Shell material	Aluminum alloy
Dimensions	300*226*70 mm
Cutout size	281*207 mm
Weight	3.3Kg
Environmental specifications	
Operating temperature	-20~70℃
Operating humidity	10~90%RH（non-condensing）
Storage temperature	-30~80℃
Storage humidity	10~90%RH（non-condensing）
shockproof test	IEC 68-2-6
Cooling mode	Natural air cooling
Product certification	
Degree of protection	IP65(4280-93)
CE authentication	EN6100-6-4:2007+A1:2011,EN61000-6-2:2005
FCC compatibility	Complies with FCC Class A
Software	
configuration software	Kinco DTools V3.2 and above version

Mechanical Dimensions Unit : mm

300
54
226
70.3

Cut-out size
207
281

Kinco F7 / F10
Whole body IP65 water-proof HMI

- Full item with IP65 water-proof.
- Bracket mounting flexible installation.
- 800MHz CPU.
- High resolution(F10 with 1280*800 pixels).
- Use pen-drive to up/download program easy to use.
- Fashion design.
- With isolated power supply,suppress interference to ensure
  the best working performance.

F7   F10

Model	F7	F10
Performance specification		
Display	7"TFT	10.1"TFT
Color	640*480 pixels	
Resolution	65536 color	1280*800 pixels
Brightness	300cd/M2	250cd/m2
Backlight	LED	
Backlight life	50000 hrs	
Touch panel	4 line precision resistance network (surface hardness 4H)	
Processor	800MHz RISC	
Memory	128MB Flash + 64MB RAM	
Recipe memory&RTC	512KB + RTC	
Expandable memory	1 USB Host (≤16G)	
Print port	USB Host/serial port	
Ethernet	None	
Program download	USB HOST	
COM port	COM0:PLC RS485-2W,COM2:PC/PLC RS232(Isolation)	
Electrical specifications		
Power supply isolation	Built-in	
Rated power	5W	8W
Rated voltage	DC 24V	
Input range	DC 18V~28V	
Power down allowed	<3ms	
insulation resistance	Over 50MΩ@500V DC	
Dielectric strength test	500 VAC 1 minute	
Structure specification		
Shell color	Metal gray	
Shell material	Engineering plastic	
Dimensions	182*116*30 mm	250*167*28.4 mm
Cutout size	Bracket mounting	
Weight	0.57Kg	0.91Kg
Environmental specifications		
Operating temperature	0~50℃	
Operating humidity	10~90%RH（non-condensing）	
Storage temperature	-10~60℃	
Storage humidity	10~90%RH（non-condensing）	
shockproof test	10~500Hz (X、Y、Z direction 2G/30 minute)	
Cooling mode	Natural air cooling	
Product certification		
Degree of protection	IP65(4280-93)	
CE authentication	EN6100-6-4:2007+A1:2011,EN61000-6-2:2005	
FCC compatibility	Complies with FCC Class A	
Software		
configuration software	Kinco HMIware V2.5	

Mechanical Dimensions Unit : mm

30
182
116
F7
60
75
25
26
75
62

28.4
250
167
F10

73
100
24
30
100
73