



Human Machine Interface

WEINTEK
MT500
Touch Screen for Industrial Applications



<http://www.weintek.com>

BRIEF INTRODUCTION OF COMPANY

ISO 9001:2000 CERTIFIED COMPANY



Touch screens nowadays are terminals of the e-world. Through the use of touch screens people can communicate with a variety of equipment of the e-world. Touch screens which are widely used in our life - such as industrial controls, KIOSK, BA, POS, ATM, etc. are very high potential products with niche market. With the coming of the e-world, the application of touch screens will be extended to all corners of our life and bring our life more convenience.

Since October 1995 Weintek Labs., Inc. has been committed to being a professional company that designs and manufactures the hardware and software of PLC Operator Interfaces, and has selected industrial control (FA) market as the company's first target market. The company's principle is to provide products of excellent quality to its customers, by which to build up its own brand name and so continue the development of its enterprise. Besides, the company has adopted a people-based management. Every Weintek employee must set himself or herself a series of goals and timetables for his or her own post of duty, and the staff of the company share the fruits of teamwork.

Since the establishment of the company, its sales results grow up by 40% ~ 60% every year. At present we lay equal weight on the sales of our own branded products (EasyView) and customers' OEM products. The percentage of overseas to domestic orders is 80% to 20%; however, along with a gradual development of its overseas market the percentage of overseas sales will gradually go up to 90+%.

The R&D of touch screens involves a variety of complicated technical integration of hardware, software and system. In hardware aspect it integrates 32-bit RISC CPU, touch panel, video conversion and multi-media, etc.; and in software aspect we use the object oriented technique in order to shorten the lead-time of development and meet customers' requirements.

The value of technology is to resolve people's demand. It is a definite trend in the future that most of user will be convinced to select simple, convenient and humanized products, and the EasyView is the brand reflects this spirit.



Products Profile

5.6-inch
8-inch
10.4-inch

MT506T
MT506TE
MT508T
MT508TE
MT510T
MT510TE

Screen Editor
EasyBuilder 500

The EasyBuilder 500 software are suitable for all EasyView product

	MT506T	MT506TE	MT508T	MT508TE	MT510T	MT510TE
Display	5.6" TFT	5.6" TFT	8" TFT	8" TFT	10.4" TFT	10.4" TFT
Color	256	256	256	256	256	256
Resolution	320 x 234	320 x 234	640 x 480	640 x 480	640 x 480	640 x 480
Flash Memory	2MB	2MB	2MB	4MB	2MB	4MB
Power Consumption	370mA@24VDC	370mA@24VDC	440mA@24VDC	440mA@24VDC	440mA@24VDC	440mA@24VDC
Operating Temperature	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C

Touch Screen for Industrial Applications



Touch Screen for Industrial Applications

The EasyView 500 series touch screen is the result of our continuous efforts to perfect our PLC touch screen products. Our accumulated knowledge in touch screen design has enabled us to produce these state-of-art touch screen, bringing out the PLC's full potential, and improving production line efficiency.

High Reliable Touch Panel

The EasyView 500 is equipped with touch panel of industrial grade. The highly reliable and rugged touch panel is critical for long term reliable operation.

Power by 32-bit RISC processor

Touch the screen and feel the power of the fastest RISC processor used in any touch screen on market. The EasyView 500 offers high performance features for the industrial environment. Even the most complicated graphics can be called up in a snap.

Connect directly to most of the PLC on market

The EasyView 500 supports direct communication with most PLCs. It is not necessary for the PLC to run any special programs for data communication. The available PLC drivers include:
AB, SIEMENS, OMRON, MITSUBISHI, KOYO, MODICON, GE FANUC, IDEC, TELEMECANIQUE, etc...



High contrast and high brightness LCD display offers 256 colors

The high-quality color displays offer superior clarity and wide viewing angles. Both STN and TFT are available. The EasyView 500 offers high reliability as all the components have been carefully selected to fulfill the requirements of the modern industrial environment.

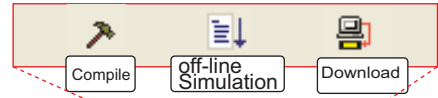
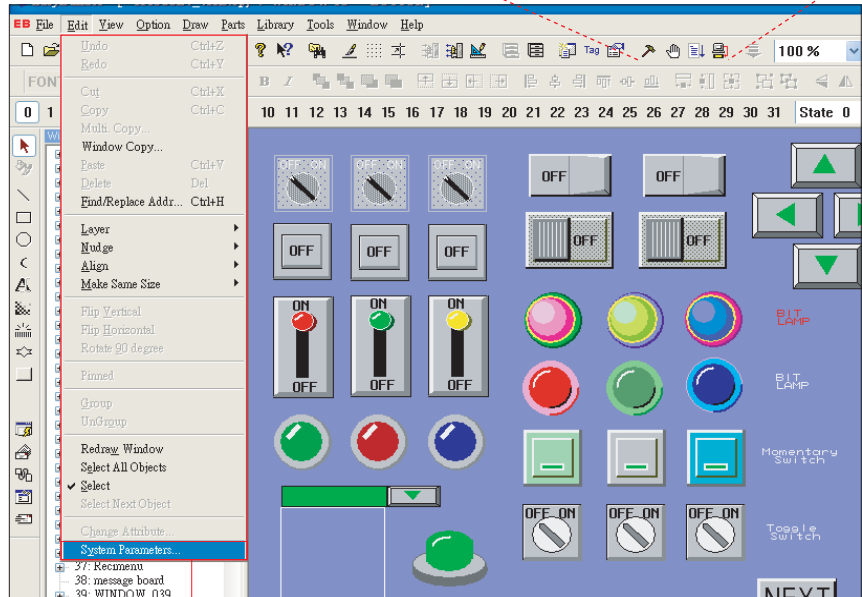
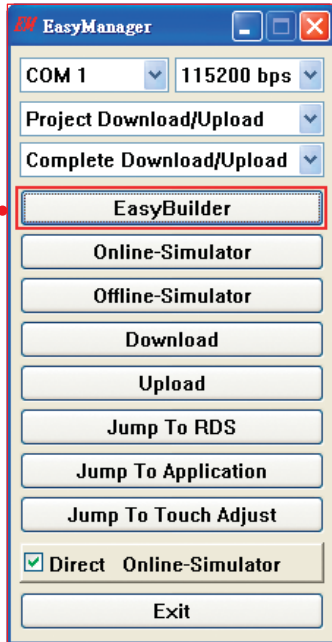
Simple & Easy Editor Software



Software operation procedures

Simple & Easy to use:

Five easy operating steps



system setting

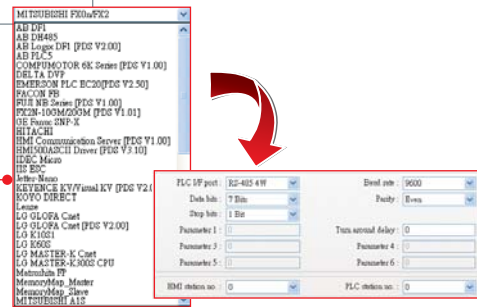
STEP 1 Start EasyBuilder 500

- Using EasyManager to start MT500 series edition software "EasyBuilder 500".
- Setting the baud rate & the number of com port in the EasyManager.



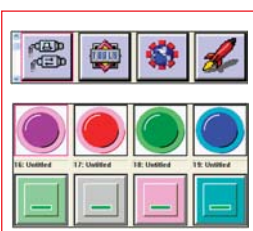
STEP 2 System Parameters Setting

- Selecting PLC type and setting communication parameters.
- EasyBuilder 500 can set communication parameters automatically by the PLC type.
- EasyBuilder 500 can easily install the new driver to support new PLC type.



STEP 3 Edit and Compile

Using EasyBuilder 500 to edit the window, then save and compile the project.




- Providing multi-functional objects.
- Providing prosperous Shape library and Bitmap library, and users also be able to create the Shape library and Bitmap library by themselves.
- Double bytes fonts support both Italics & Bold fonts and also available for the Windows built-in fonts.
- The Windows Treebar provides quick access to Window properties and objects.
- Only need to double-clicking on the object then appears a attribute Window for users to edit easily.
- Compile function will detect automatically if the project of users' editing data have errors.



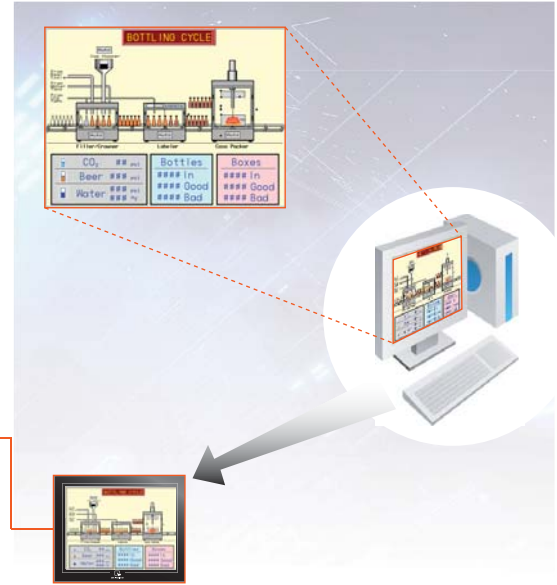
STEP 4 Offline Simulator

Simulate the MT500 HMI operations on PC without MT500 & PLC

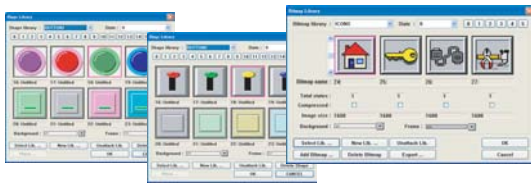
- The Offline Simulator emulates the operation of a project on the PC screen.
- Also can use Direct Online Simulator. The Simulator will directly retrieve the data from PLC.(10 minutes limit for the simulation.) 

STEP 5 Download

- Users may choose downloads the picture regular material,only to reduce the downloading time.
- The MT500 HMI can jump to the application mode automatically after downloaded.
- Using Compact Flash(CF) card to download the project or recipe data. (suitable E series HMI)



Shapes and Editing

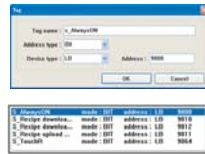


Shapes, Symbols and Editing

- || Providing prosperous Shape library and Bitmap library,including each kind of shape and symbol.
- || Users can design and modify shape library and bitmap library by themselves.
- || Available double bytes fonts choose the Windows built-in fonts and users can choose Fonts in Italics or Bold.

Tag

- || The Tag defines the device address where the HMI reads or writes data for the object. The Tag Library provide easy reference tags name and device address.
- || The Tag could be imported and exported via CSV format and using EXCEL to edit.



Multi-Language



- || Every project can select one single-byte font (English and European languages) or one double-bytes font (Simplified Chinese, Traditional Chinese, Korean Japanese or by using Windows fonts library). You can develop an application in 4 different languages at same time.
- || Using UNICODE version of EasyBuilder 500 could be allowed show different double bytes characters on screen at same time. For example: Display the Japanese, Korean, Simplified Chinese and Traditional Chinese.
- || Users can use Label library to edit multi-language by EXCEL, also it can import or export by CSV format.

Support Portrait Display Mode

- || Change the screen direction to vertical display and fit the control panel space



Macro

The Macro function is a VB Script like language.

- || Macro function provides a special feature that enables users to create a program to execute function.
- || Macro support sub-macro function.

```
Macro_Command main( )
int acuity_packet
bool off = 0

SetData(off, LB_Bin, 6#10, 1)

GetData(acuity_packet, LV_Simple, 6#50, 2)
SetData(acuity_packet, LV_Simple, 6#100, 3)

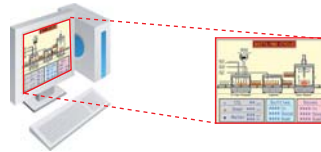
End Macro_Command
```

Software Features

Powerful Simulator

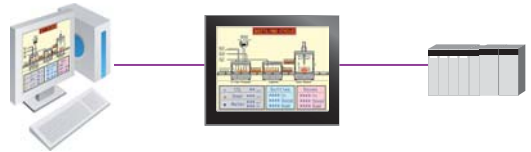
Offline Simulator

- || Simulate the MT500 HMI operation on PC without MT500 HMI and PLC.



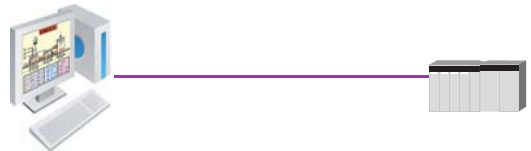
Online Simulator

- || Simulate the MT500 operation on PC with both MT500 HMI and PLC. The Simulation will retrieve the data from PLC through MT500 HMI and simulate MT500 operation.



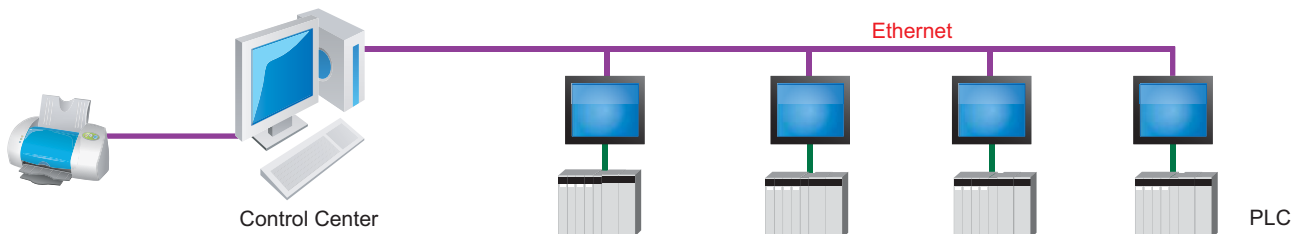
Direct Online Simulator

- || Simulate the MT500 operation on PC only with PLC. The Simulation will directly retrieve the data from PLC. (There is a time limit of 10 minutes limit for the simulation.)



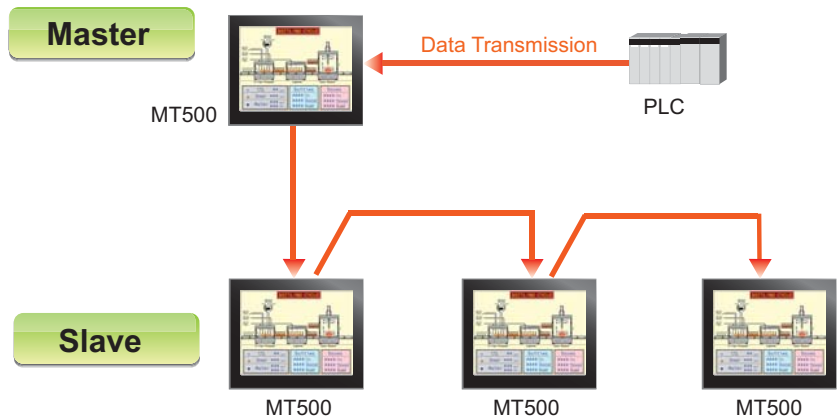
Direct Online Simulation Of Running A Slave Project

- || The Slave Simulation will retrieve the data from Master MT500 HMI.
- || One PC can run several simulations to monitor multiple MT500 HMI's. (There is no time limit for the simulation.)



Master-Slave Communication Capability

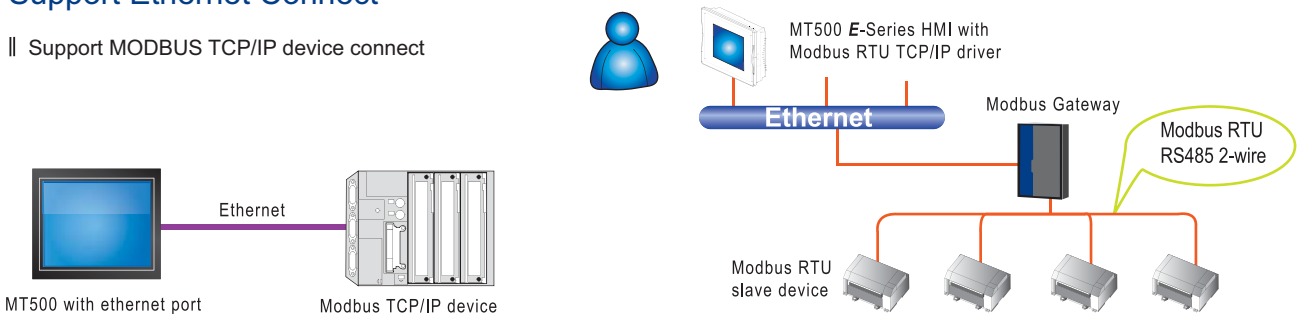
- || All the MT500s are connected one by one and the first one connects with the PLC.
- || The MT500 now is able to support master-slave communication feature for every PLC it supports.



MT500 E-Series Features

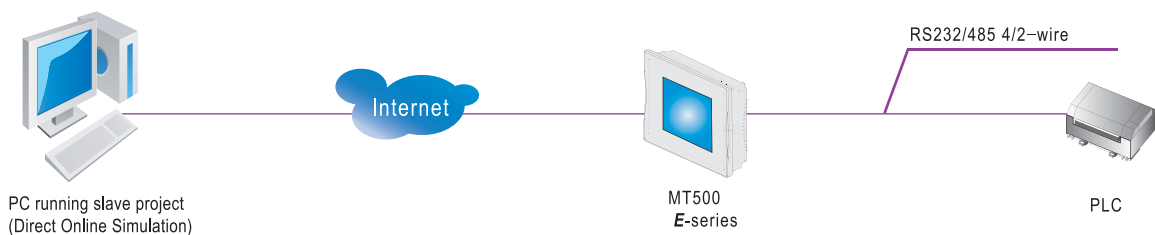
Support Ethernet Connect

- || Support MODBUS TCP/IP device connect



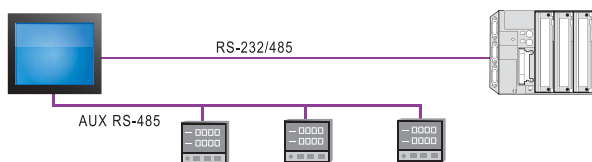
Support Master-slave TCP/IP

- || Two MT500 E-series, using the Ethernet connection can share data on the HMI or the PLC.
- || Direct Online Simulation Of Running A Slave Project, will directly retrieve the from PLC or HMI, there is no time limit for the simulation.



Dual Port Driver Support

- || The AUX port (RS232/RS485 2wires) can select second device driver. Communicate to Temperature Controller, Inverter and Distributed I/O.
- || Supports MODBUS TCP/IP device and OMRON Temperature Controller.



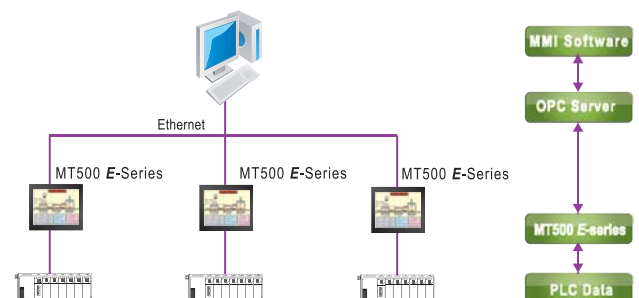
Project down through Compact Flash Card

- || About CF Card download: MT5xxE4 Series provide a CF Card socket. You can download your project onto multiple HMI's just through CF Card and do not need PC. The process is very easy and fast, and it is efficient for you to upgrade the project of a remote HMI just by the transfer of a CF Card.






MT500 Master/Slave OPC server (option)

- || MT500 Master/Slave OPC server software provides PLC data to Supervisory Control And Data Acquisition (SCADA) systems via Ethernet.
- || MT500 Master/Slave OPC server supports all of the PLC drivers that are available for the MT500 Series HMIs.



NEW

Picture	 MT510TE	 MT508TE	 MT506TE
Display	10.4"TFT	8"TFT	5.6"TFT
Brightness	400cd/m ²	400cd/m ²	500cd/m ²
Color	256 color	256color	256
Contrast Ratio	300:1	250:1	150:1
Resolution(WxH)	640 x 480	640 x 480	320 x234
Back Light	CCFL x 2	CCFL x 1	CCFL x 1
CCFL Life time(avg.)	50,000 hr.	50,000 hr.	30,000 hr.
Touch Panel	4 wires resistive type		
Touch Accuracy	2mm		1.5mm
Surface Hardness	4H		
Serial Interface	PC(RS-232),PLC(RS-232/485)		
AUX port	AUX(RS-232/RS485 2-wire)		
Ethernet port	Yes (10 Mbps)		
Processor	32 bit RISC CPU 200 MHz		
Flash Memory	4MB		2MB
Recipe Memory	1 2 8 K B		
Compact Flash Card	Yes		
RTC	Yes		
Parallel Printer port	Yes		N/A
System Diagnostic	Power failure detection		
Input Power	24 VDC ± 5%		
Power Consumption	440mA@24VDC	440mA@24VDC	370mA@24VDC
Dimensions WxHxD	315 x 238 x 62mm	231 x 176 x 55mm	204 x 150 x 48mm
Panel Cutout WxH	320 x 225 mm	222 x 167 mm	192 x 138 mm
Weight	Approx 2.0kg	Approx 1.2kg	Approx 0.84kg

General Specification

CE	Complies with EN50081-2 and EN50082-2 standards
FCC	Complies with FCC Class A
Voltage Resistance	500VAC (1 min.)
Isolation Resistance	Exceed50MW at 500 VDC
Vibration Endurance	10 to 25 Hz (X,Y,Z direction 2G 30minutes)
Protection Structure	IP65 front panel (O ring seal)
Storage Temperature	-20~60°C
Operating Temperature	0~45°C
Operation Humidity	10-90% RH (non-condense)
Enclosure	Plastic

Hardware Specifications



MT510T



MT508T



MT506T



MT506L

10.4" TFT	8" TFT	5.6" TFT	5.7" BLUE
400 cd/m ²	400cd/m ²	500 cd/m ²	120cd/m ²
256 color	256 color	256 color	4 gray scale
300:1	250:1	150:1	15:1
640 x 480	640 x 480	320 x 234	320 x 240
CCFL x 2	CCFL x 1	CCFL x 1	CCFL x 1
50,000 hr.	50,000 hr.	30,000 hr.	50,000 hr.
4 wires resistive type			
2mm		1.5mm	
4H			
PC(RS-232), PLC(RS232/485)			
N/A			
N/A			
32bit RISC CPU 200MHz			
2MB			
128kB			
N/A	N/A	N/A	N/A
Yes	Yes	Yes	Yes
Yes	Yes	N/A	N/A
Power failure detection			
24 VDC ± 5%			
440mA@24VDC	440mA@24VDC	370mA@24VDC	370mA@24VDC
315 x 238 x 62mm	231 x 176 x 55mm	204 x 150 x 48mm	204 x 150 x 48mm
302 x 225 mm	222 x 167 mm	192 x 138 mm	192 x 138 mm
Approx. 2.0kg	Approx. 1.2kg	Approx. 0.84kg	Approx. 0.84kg

General Specification

Complies with EN50081-2 and EN50082-2 standards

Complies with FCC Class A

500VAC (1 min.)

Exceed 50MW at 500VDC

10 to 25 Hz (X,Y,Z direction 2G 30minutes)

IP65 front panel (O ring seal)

-20~60°C

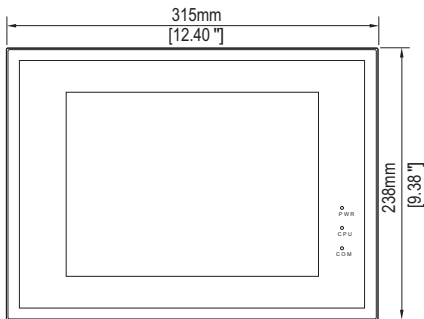
0~45°C

10-90% RH (non-condense)

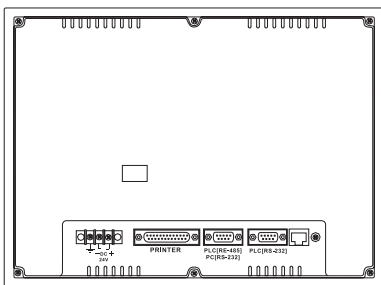
Plastic

Products Dimension

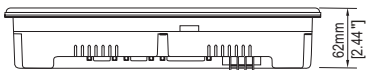
MT510T/MT510TE



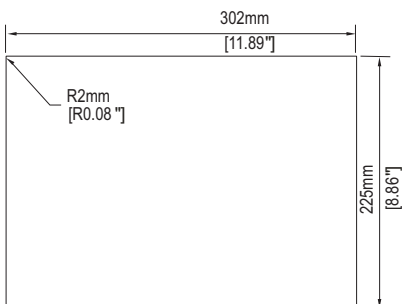
Front View



Rear View

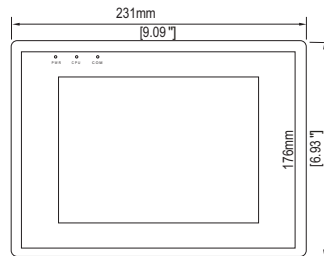


Bottom View

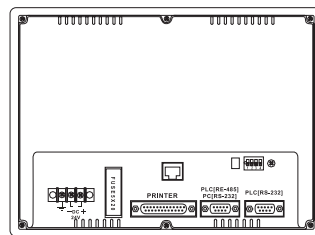


Panel cutout

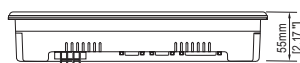
MT508T/MT508TE



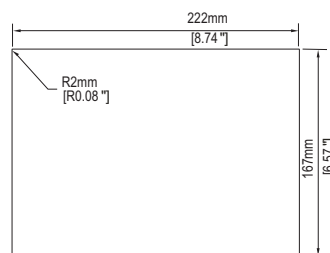
Front View



Rear View

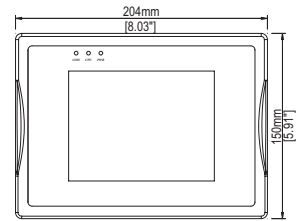


Bottom View

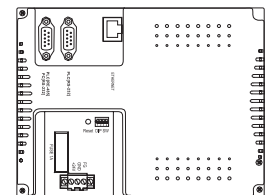


Panel cutout

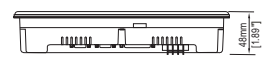
MT506T/MT506TE



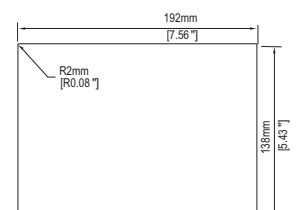
Front View



Rear View



Bottom View



Panel cutout



MT5-PC Cable
PC to MT download cable



• Accessories

PS506 : MT506 Protective Sheet

PS508 : MT508 Protective Sheet

PS510 : MT510 Protective Sheet



MT5-FX2N-3M Cable
Mitsubishi FX series



MT5-AnS Cable
Mitsubishi AnS series



MT5-MPI Cable
Siemens S7-300

Support PLC Type

AB MicroLogix (DF1 Protocol)
AB SLC500 (DF1, DH485)
AB PLC5 (DF1 Protocol)
AB CompactLogix, FlexLogix
(AB Logix DF1)
Compumotor (Parker) 6K
Motion Controllors
Delta DVP
Emerson EC20 Series
Facon FB, FBs
Fuji NB Series
GE Fanuc Micro, 90-30
Series (GE SNP-X Protocol)
General GNP-CPU
Hitachi H Series
Idec Mirco3
IIS Emerald EMC-2000
INVT CHV/CHE Inverter
Jetter Nano

Keyence KV Series
Koyo Direct Logic Series (K-sequence)
Lenze 9300/8200
LG Glofa Cnet
LG Master K Cnet
LIYAN E
Matsushita (NAIS) FP
Mitsubishi AJ71 Communication Module
Mitsubishi FX Series
Mitsubishi A Series
Mitsubishi Q00/Q01 CPU, QJ71 Com-
munication Module(QJ71)
Mitsubishi J2-S100(MR-J2-10C)
Mitsubishi 232/485 BD
Mitsubishi FX2N-10GM/20GM
Modicon PLC (Modbus RTU)
Modicon TSX Micro, Nano, Neza
Series (UnitelWay)
OMRON CPM, CQM Series (Host Link)

OMRON C200H/HS/ALPHA
Series (Host Link)
OMRON CP1H, CJ1, CS1 Series
OMRON E5CN Series
SAIA PCD Series
SamSung SPC-10
Sharp JW Series
Siemens S7/200
Siemens S7/300
Siemens TI505 Series
Taian TP02 Series
Telemecanique Twido (Modbus
RTU)
Toshiba T Series
VIGOR M/V/VB Series
Yokogawa FA-M3 Series

