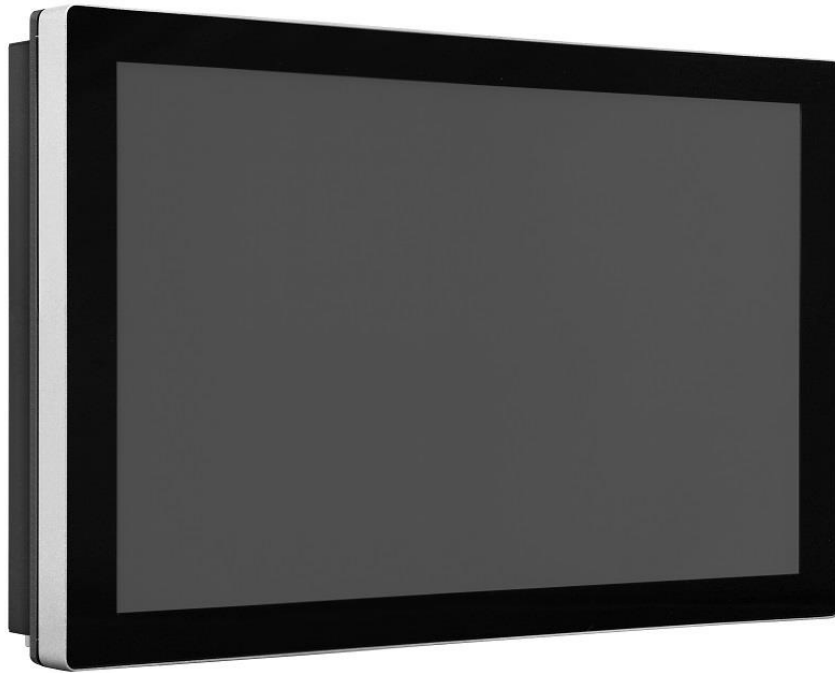




TDM Wide Temperature Series P-cap Touch Monitor User Manual

Published in Taiwan

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Revision : V0.2

Warning!

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction's manual, it may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Electric Shock Hazard – Do not operate the machine with its back cover removed. There are dangerous high voltages inside.

Disclaimer

This information in this document is subject to change without notice. In no event shall ELGENS Co., Ltd. be liable for damages of any kind, whether incidental or consequential, arising from either the use or misuse of information in this document or in any related materials.

Packing List

Accessories (as ticked) included in this package are:
☐ Panel Mounting Kits
☐ 3 Pin Male Terminal Block
☐ Optional Adapter
☐ Other. _____ (please specify)

Safety Precautions

Follow the messages below to avoid your systems from damage:

- ◆ Avoid your system from static electricity on all occasions.
- ◆ Prevent electric shock. Don't touch any components of this card when the card is power-on. Always disconnect power when the system is not in use.
- ◆ Disconnect power when you change any hardware devices. For instance, when you connect a jumper or install any cards, a surge of power may damage the electronic components or the whole system.

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Chapter 1 Getting Started

1.1 Brief Description of TDM P-cap Series

The TDM-WT series is an entry and robust Touch Monitor. It comes with project capacity touch or resistive touch.

The Elgens' TDM series solution also provides optional features such as high brightness, Anti-Glare, Mosmite Film, 9~36Vdc power input.

The Elgens' touch monitor is ideal for industrial environment as Web Browser, Terminal, HMI at all levels of automation control with high-performance system that working.

1.2 System Specifications

Model Number	TDM-P101WT	TDM-P121ST	TDM-P150ST	TDM-P156WT
Max Resolution	1280*800	1024*768	1024*768	1920*1080
Color	16.7M	16.7M	16.2M	16.2M
Luminance	500 nits	500 nits	350 nits	450 nits
View Angle (H/V)	178/178	160/140	160/140	170/170
Contrast Ratio	800	700	700	800
Model Number	TDM-P185WT	TDM-P190ST	TDM-P215W-1E	TDM-P240WT
Max Resolution	1920*1080	1280*1024	1920*1080	1920*1080
Color	16.7M	16.7M	16.7M	16.7M
Luminance	350 nits	350 nits	350 nits	300 nits
View Angle (H/V)	170/170	170/160	178/178	178/178
Contrast Ratio	1200	1000	1000	5000
Specification				
IOs	VGA / HDMI / DP Input Port USB Port for Touch			
Touch Screen				
Type	USB P-cap Touch			
Light Transmission	90%			
Power Supply				
Power Input	■ DC12V Power Input, Optional DC9~36V Wide Range Power Input ■ 3-Pin Terminal Block			
Mechanical				
Construction	Aluminum Front Bezel with Metal Case			
IP Rating	Front Panel compliant IP65			
Mounting	Panel/VESA Mount			

Environmental	
Operating Temperature	-30~70 °C
Storage Temperature	-30~70 °C
Storage Humidity	10~90% @40 °C non-condensing

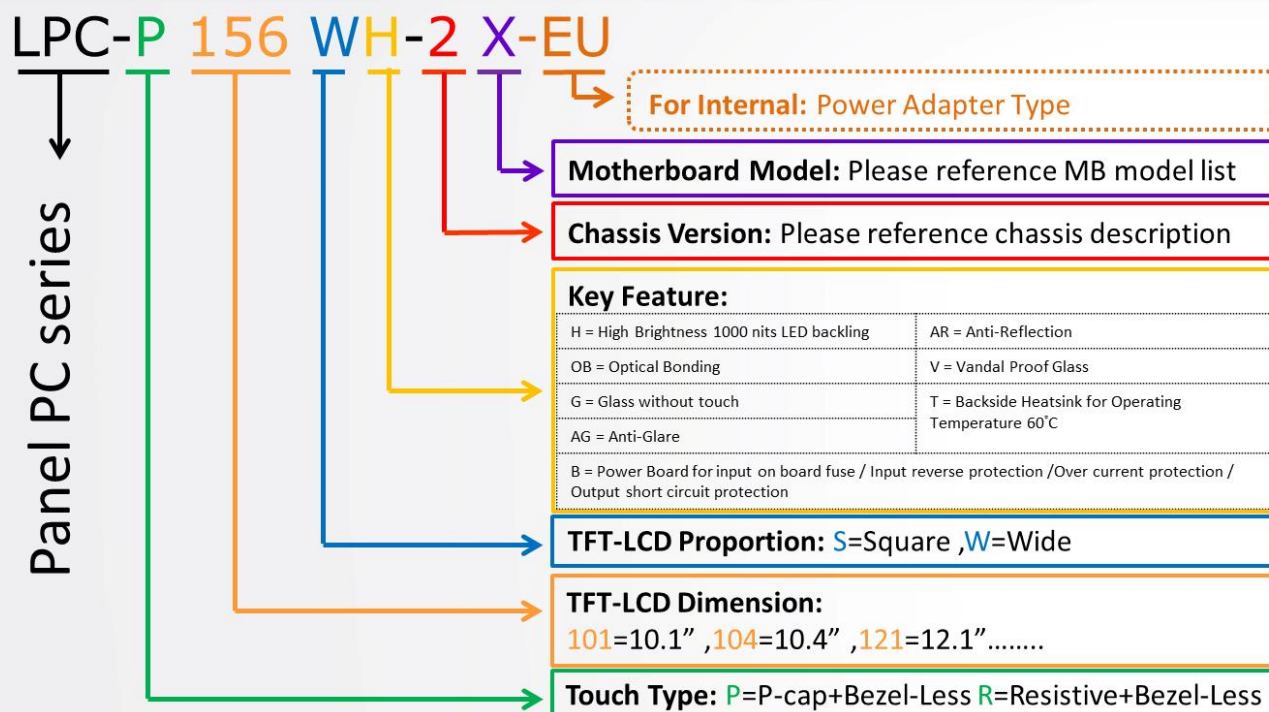
1.3 General instructions

1. Support Vertical refresh rate up to 75Hz for VGA~SXGA+(1400x1050) and 60Hz for higher resolution of VESA Standard Timing.
2. Support VGA analog standard input (15-pin D-Sub connectors).
3. Automatic detection of separate synchronize and composite synchronizes of VGA.
4. Support High-Definition Multimedia Interface (HDMI) input.
5. RoHS compliant.
6. Support Timing Table (By models may have different)

Mode	Resolution	H Freq.(KHz)	V Freq.(Hz)
1	640*350@70	31.469	70.087
2	640*480@60	31.469	59.940
3	640*480@72	37.861	72.809
4	640*480@75	37.500	75.000
5	720*400@70	31.469	70.087
6	800*600@56	35.156	56.250
7	800*600@60	37.879	60.317
8	800*600@72	48.077	72.188
9	800*600@75	46.875	75.00
10	1024*768@60	48.363	60.004
11	1024*768@70	56.476	70.069
12	1024*768@72	58.038	71.918
13	1024*768@75	60.023	75.029
14	1280*720@50	36.91	49.82
15	1280*720@60	44.62	59.81
16	1280*1024@60	63.980	60.000
17	1280*1024@70	74.882	69.853
18	1280*1024@75	79.976	75.025

1.4 Naming Rule

➤ Model Naming Rule



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Order Information – Extra Features

TDM-PxxxxT	Bezel-Free P-cap Touch Monitor, VGA/DP/HDMI Input, DC 12V Power Input, including a 3-Pin Power Adapter, -30~70 °C
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Order Code

TDM-PxxxS/WT -H / -OB / -AG / -AR / -V

P = P-Cap touch

B = Glass without touch

xxx = size, For example, 10.1" = 101

S = Dimension Ratio Square = 4:3 or 5:4

W= Dimension Ration Wide = 16:9 or 16:10

H = High Brightness 1000 nits LED backlight (Optional, up to 1600 nits backlight)

F = Mosmite Film (Optional)

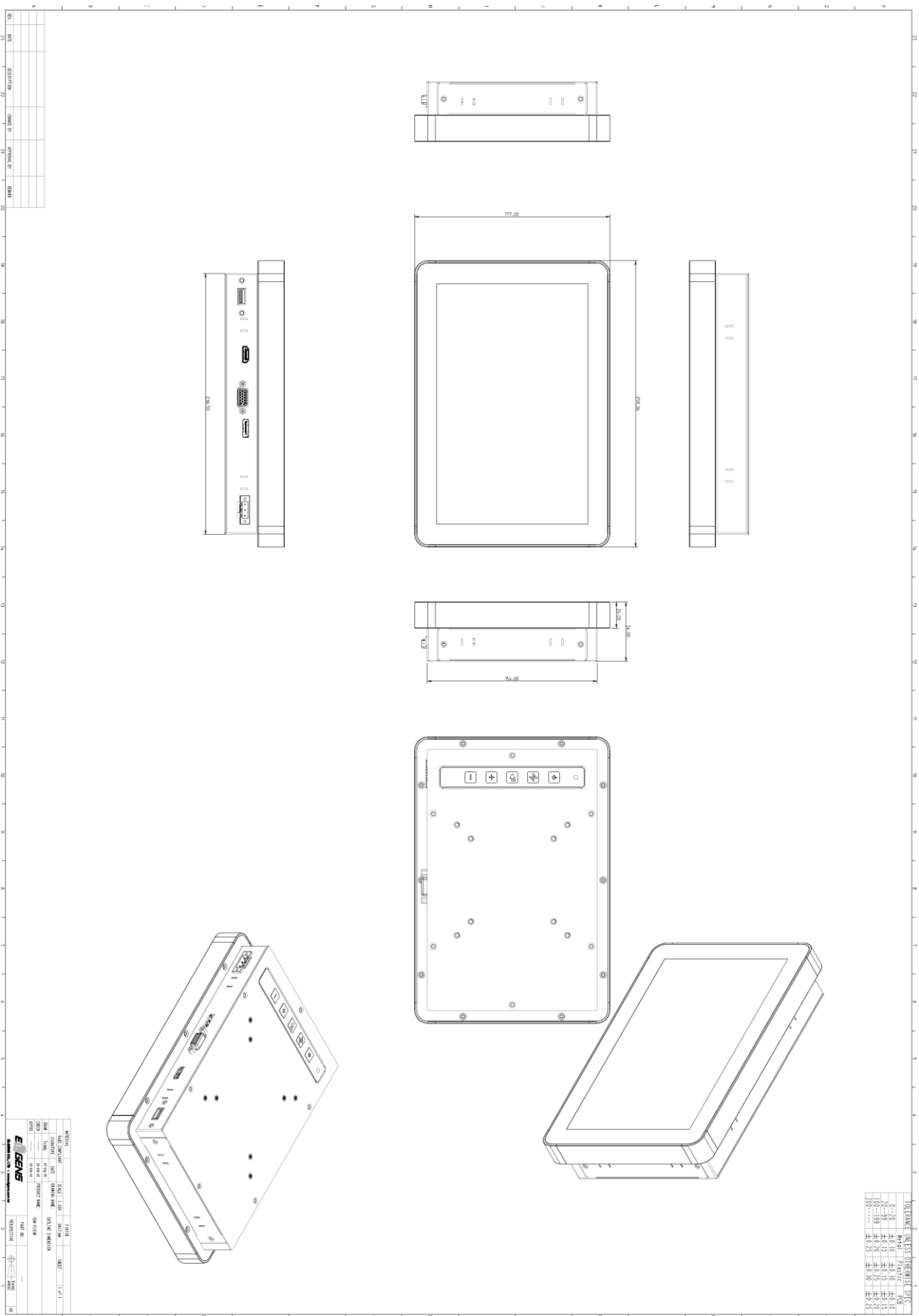
AG = Anti-Glare (Optional)

AR = Anti-Reflection (Optional)

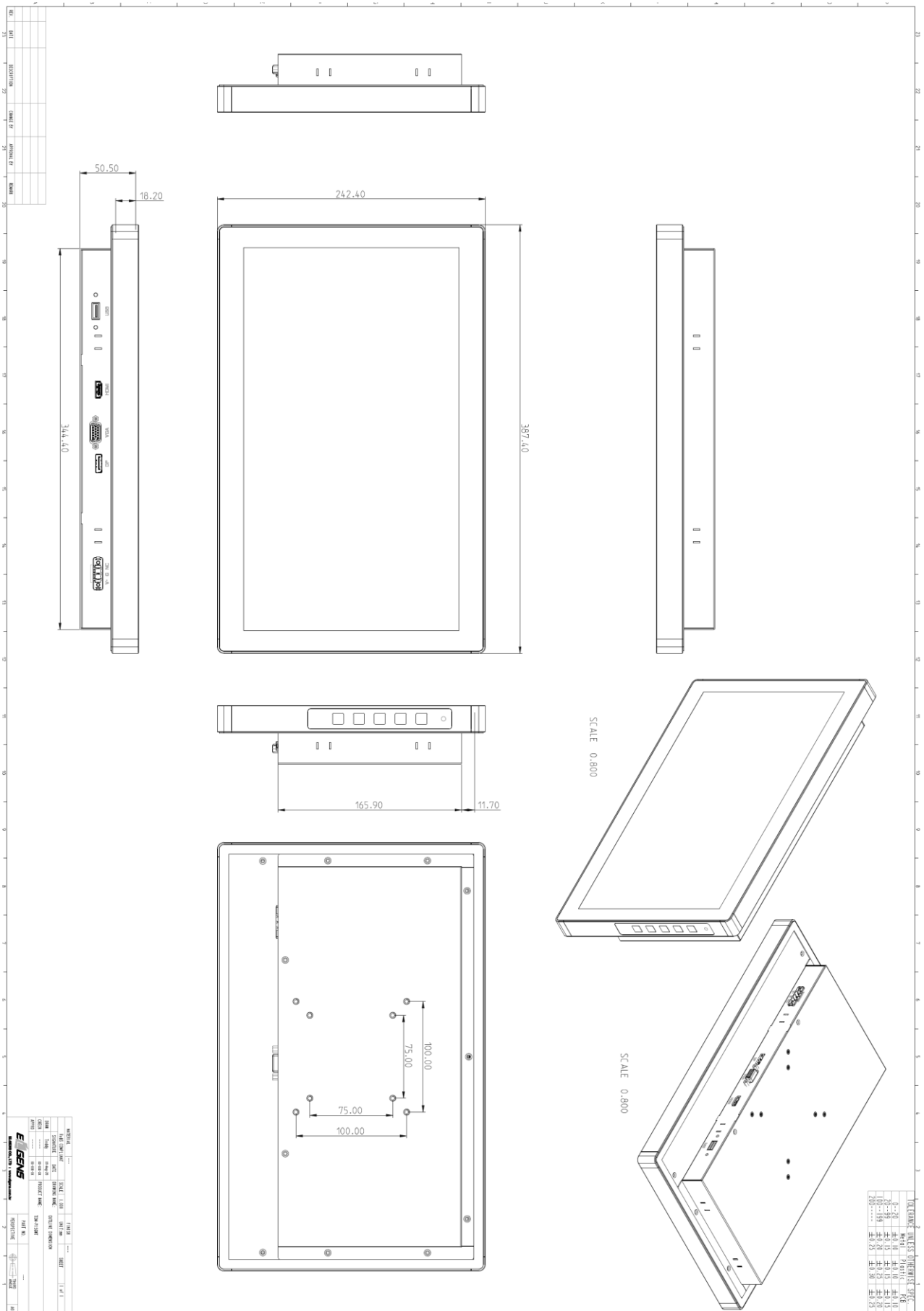
V = Vandal Proof Glass (Optional)

1.5 Dimension

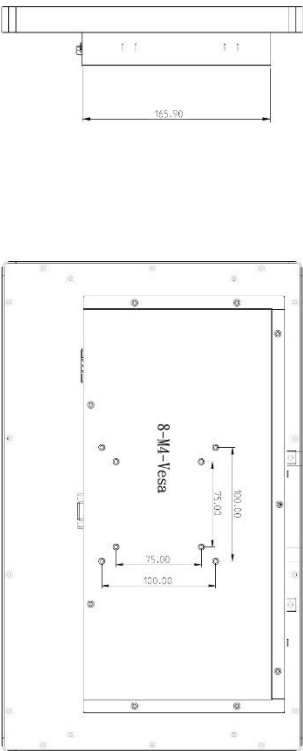
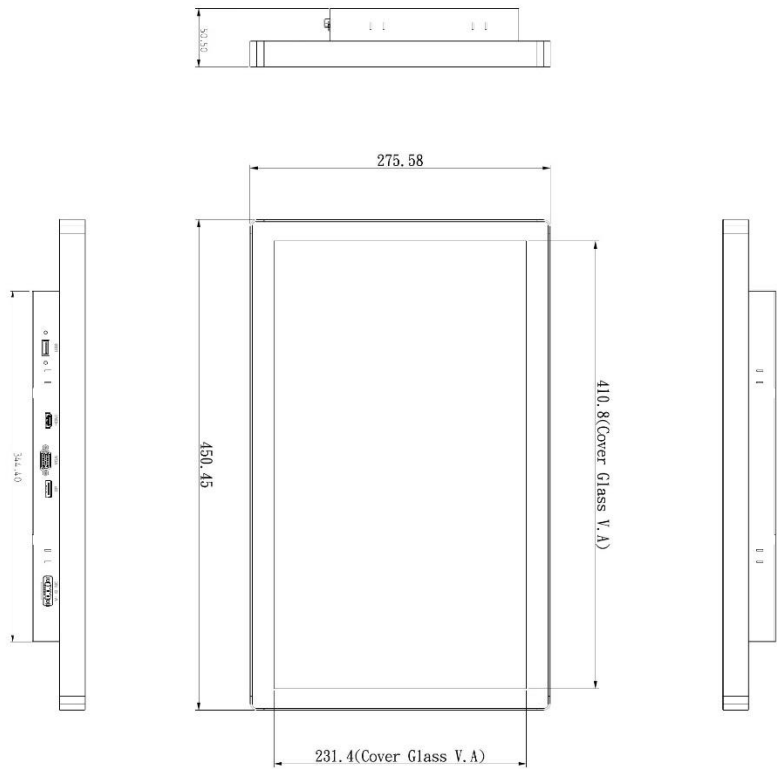
TDM-P101WT Drawing



TDM-P156WT Drawing



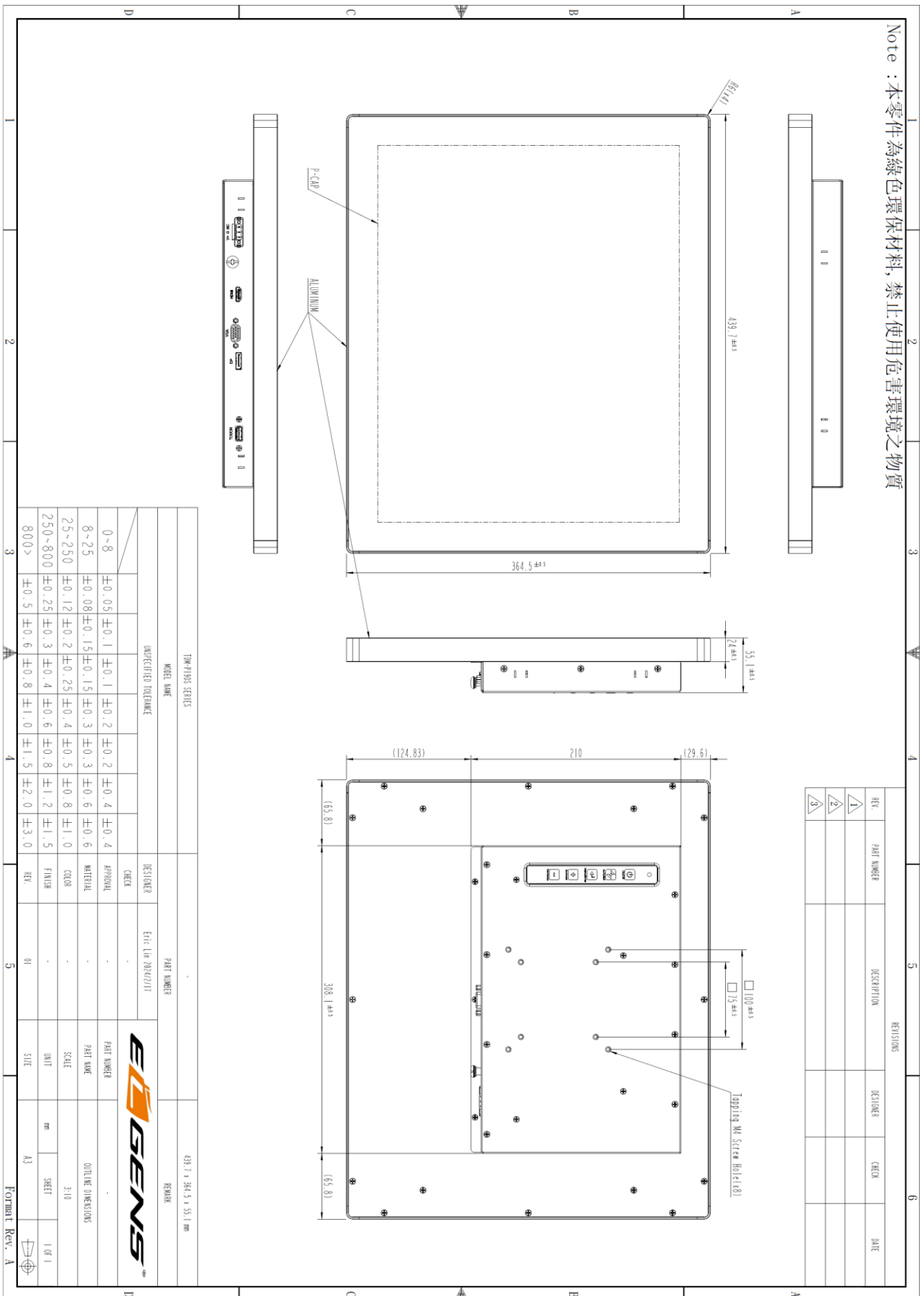
TDM-P185WT Drawing



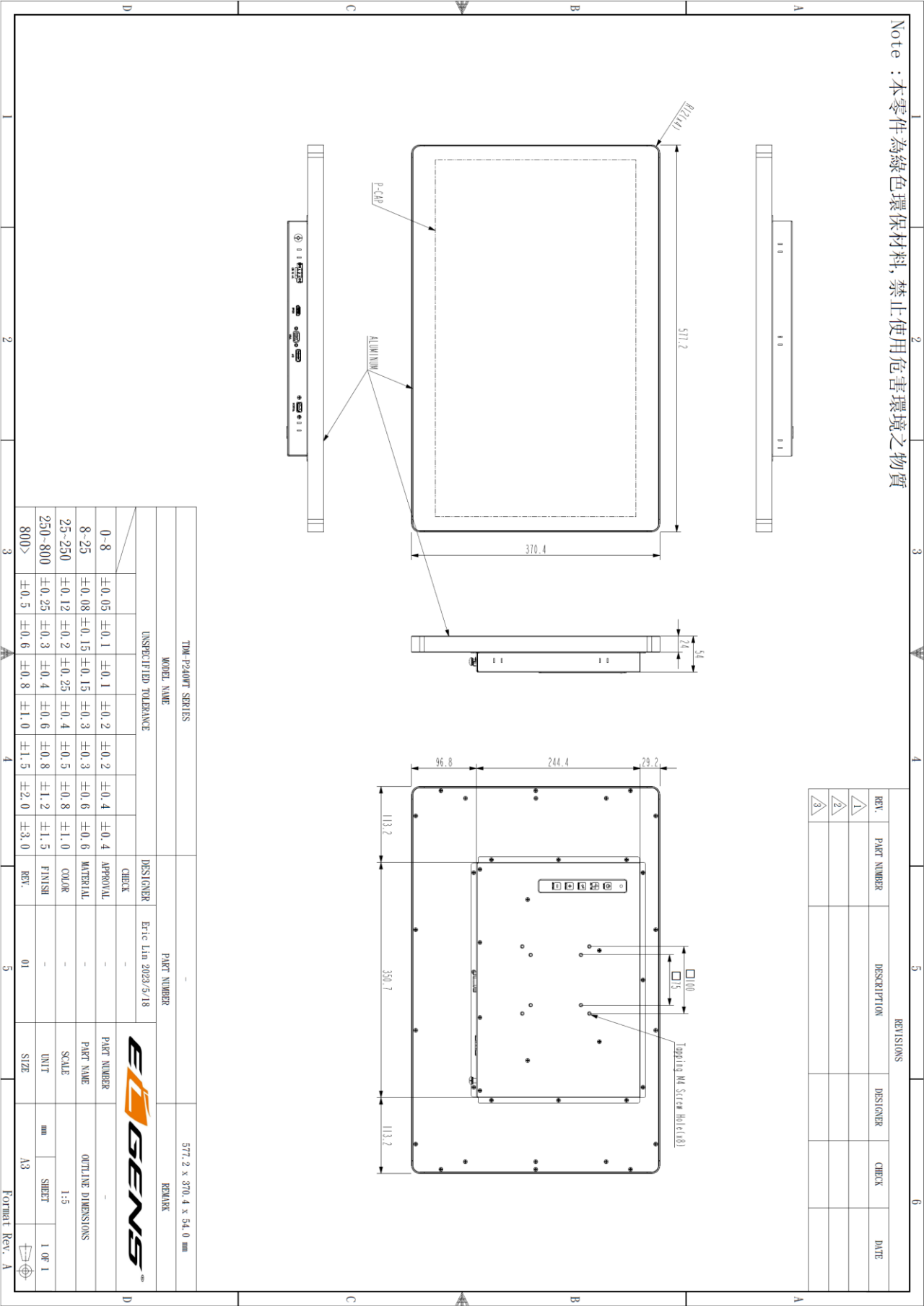
TOLERANCE		REVISION	
0mm-15mm	±0.1	MATERIAL	APPROVED
15mm-30mm	±0.1	THICKNESS	CHECKED
30mm-50mm	±0.15	FINISH	DESIGNED
50mm-120mm	±0.2	SCALE	DRAWN
ABOVE 120mm	±0.3	UNIT	PART NO
ANGLE	±0.5	mm	AI

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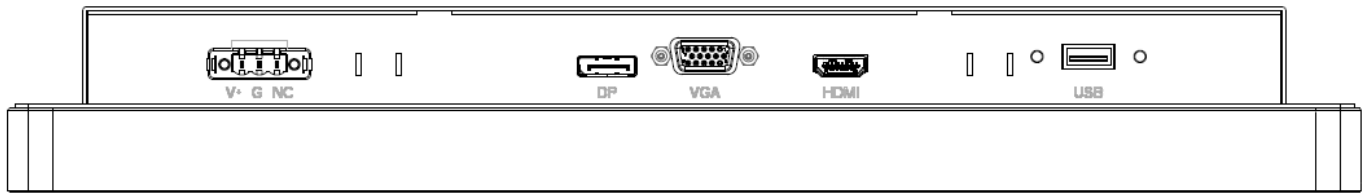
TDM-P190ST Drawing



TDM-P240WT Drawing

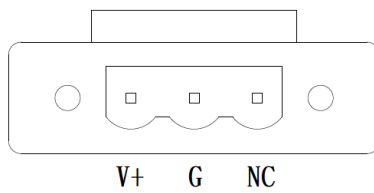


1.6 General Rear IO Placement

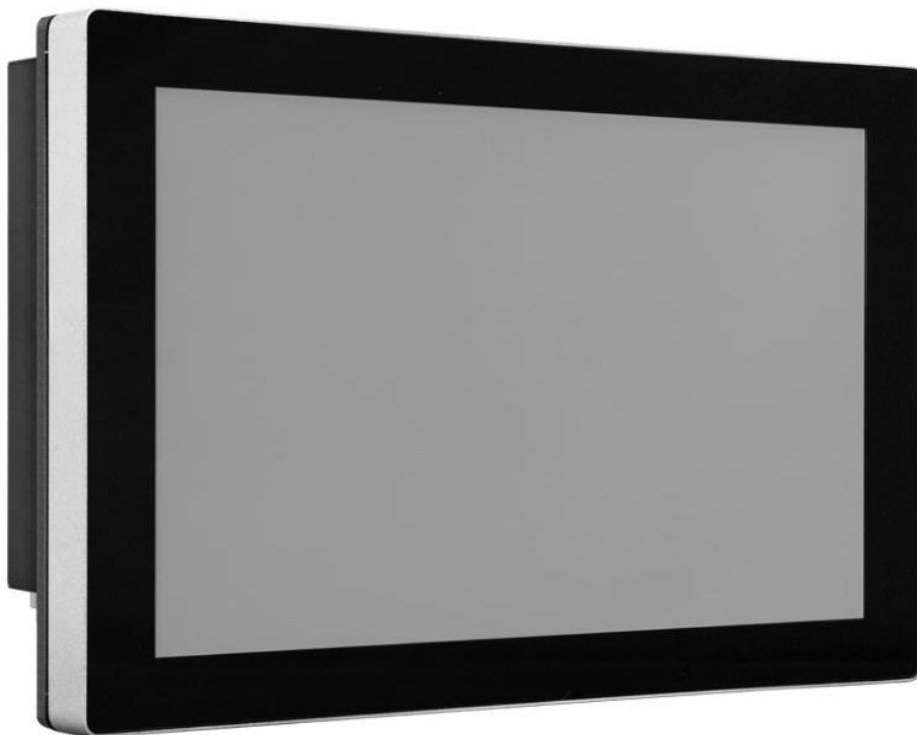


TDM Wide Temperature Series

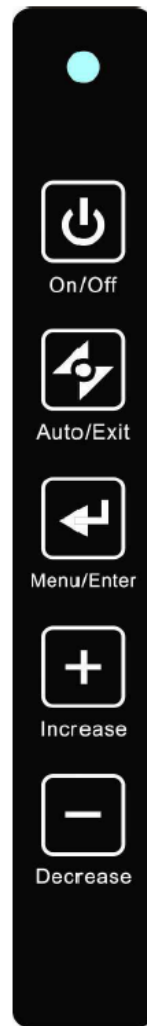
Power input terminal block pin definition is as below.



1.7 Front View of TDM Series



2.1 OSD Button



Power LED : OFF: Power Off , Orange: No Input , Green: Input Normal

On/Off : Power Button for switch On/Off the Monitor

Menu/Enter : Enable OSD , Enter Items, Save

Increase : Select item , Right or Increase value

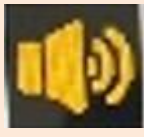
Decrease : Select item , Left or Decrease value

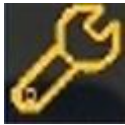
2.2 OSD Operation

How to configure

1. Press the “MENU/Enter” button to activate the OSD menu.
2. Press the “+” / “-” button to navigate through the functions. Select the highlight and desired function and press the “MENU/Enter” button to activate it. If the function selected has a sub-menu, also press the “+” / “-” button to navigate through the sub-menu functions and select the highlight and desired sub-menu function and press the “MENU/Enter” button to activate it.
3. Press the “+” / “-” button to change the settings of the selected function and press the “MENU/Enter” button to save settings.
4. To press the “Auto/Exit” to quit OSD menu or sub-menu. Or you can wait OSD menu disappears automatically.
5. Repeat steps 1-3 to adjust other settings.

2.3 The Menu Bar

Menu	Sub Menu	Value	Note
Picture 	Backlight	0~100, Interval = 1	
	Brightness	0~100, Interval = 1	
	Contrast	0~100, Interval = 1	
	Sharpness	0~4, Interval = 1	
Display 	Auto Adjustment	Auto setting	
	H. Position	0~100, Interval = 1	
	V. Position	0~100, Interval = 1	
	Pixel Clock		
	Phase		
Colour 	Gamma	Off 、 2.0 、 2.2 、 2.4	
	Color Temp.	5800K 、 6500K 、 9300K 、 USER USER mode can set R,G,B value separate by customer (0~256, Interval = 1)	
	Hue	0~100, Interval = 1	
	Saturation	0~100, Interval = 1	
	Auto Color	Auto setting	
Input 	Auto Select		
	VGA		
	HDMI		
	DVI		
Extra 	Ratio	5:4 、 Original 、 Full Screen	
	Overscan		
	Ultra Vivid		
	Reset	Rest All Setting	

Other 	Menu Time		
	OSD H. Position	0~100, Interval = 1	
	OSD V. Position	0~100, Interval = 1	
	Language	English 、 繁體中文 、 Español 、 Italiano 、 Deutsch 、 Francais	
	Transparency	OSD Transparency	
Information 		Display Current Status	

History

Revision	Date	Modification	Note
0.1	2022.08.30	1 st Release	
0.2	2024.06.17	Change Format	