

# MANUAL Touch monitors



## Touch monitor

21,5"

DE2150-0002-C810

Touch Monitor zero bezel

Industrial open frame



# 21,5"

# Touch monitor

## DE2150-0002-C810

Open Frame Touch Monitor

## Application

- Self service
- Healthcare
- Gaming
- Industrial automation



## Features

1. Integrated design with better stability and reliability.

2. Capacitive touchscreen for premium image quality and support 10-point touch.

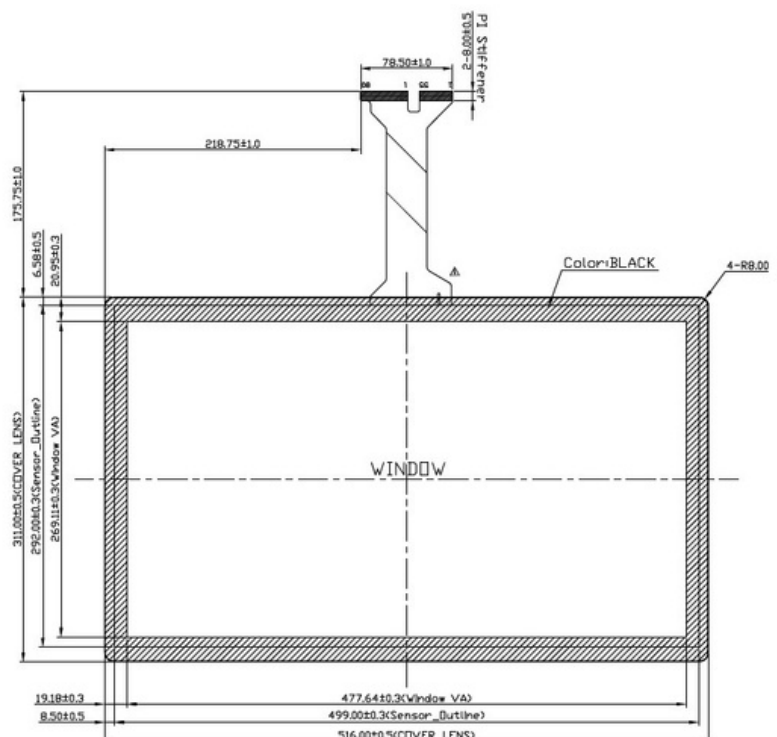
3. 85°(h) x 80°(v) visible angle, no matter mounted in landscape or portrait, also have optimal clarity and the viewing experience.

4. High-definition LCD displays offer superior high-definition interactivity, clarity and resolution.

5. 2-year warranty.



FRONT VIEW



# Specifications

Part number	DE2150-0002-C810-B0
Enclosure color	Black
Active area	476.64mm (H) x 268.11mm (V) / 18.76" x 10.56"
Diagonal	21.5 inch
Aspect Ratio	16:9
Resolution	1920(H) ×1080(V)
Other Supported Resolutions	640x480 60Hz; 720x400 60Hz; 800x500, 60Hz; 800x600 56, 60Hz; 1024x768 60Hz; 1280x800; 60Hz; 1280x1024 60Hz; 1366x768 60Hz, 60Hz RB; 1440x900 60Hz, 60Hz RB; 1680x1050 60Hz,60Hz RB;
Number of Colors	16.7M
Brightness (typical)	LCD panel: 250 nits
Response Time (typical)	14ms
Viewing Angle 89°(H)	85°(H) ; 80°(V)
Contrast Ratio	1000:1
On Screen Display	Accessible through switches on the unit's tethered OSD Control box. Controls: Menu, Up, Down, Select, Power Settings: Brightness, Contrast, Clock, Phase, H-position, V-position, Auto-Adjust, Aspect Ratio, Sharpness, Color Temperature, OSD timeout, OSD Language, OSD H-Position, OSD V-Position, Information Languages: English, French, Italian, German, Spanish, Simplified Chinese, Traditional Chinese, Japanese, Russian, Korean
I/O Ports	Serial port (IntelliTouch only), USB Type B, RJ45 for OSD remote key, VGA, HDMI, Display Port, 12V D/C in
Input Video Format&Frequency	HDMI V1.3 Type A receptacle for HDMI input, Analog VGA on Female DB-15 connector, DisplayPort V1.1a - Supports later versions of DisplayPort video input, Vertical: 50 - 75 Hz
Power Supply	External DC - Optional power brick (sold separately), Input voltage range: 100-240 VAC, Input frequency: 50-60 Hz, Output Voltage: 12VDC +/- 5%
Power Consumption (Typical)	ON (Default - 80% Brightness): 19W SLEEP FROM PC (monitor + adapter): 0.3W OFF (monitor + adapter): 0.2W
Temperature	Operating : 0°C ~ 40°C (32°F ~ 104°F) Storage: -20°C ~ 60°C (-4°F ~ 140°F)
Humidity	Operating: 20% - 80%RH; Storage: 10% - 95%RH
Weight	Unpackaged: 4.9 kg; Packaged: 8.1 kg
Shipping Box Dimensions	732mm (L) x 98mm (W) x 388 mm (H)
Mounting Options	100x100mm VESA mount on rear of unit. 2 Hole mounting interface on all four sides. Flush mount with included brackets.
Compliance	ESD: 15 kV air / 8 kV contact ESD compliant IK08 impact compliant
Warranty	2-year
MTBF	50,000h
Regulatory approvals and declarations	CE or other according to customer requirements
Accessory for options	HDMI cable, VGA cable, OSD remote, Touch USB cable, OSD cable, DC-Power, QuickInstall Guide, "L" (Side Mount) Brackets and w/Screws

# Installation

## Unpacking the Touchscreen Monitor

- ◆ VGA cable
- ◆ HDMI cable
- ◆ Mounting brackets
- ◆ USB cable
- ◆ OSD remote

## Connector Panel & Interfaces



## Touchscreen Monitor Connections

1. Connect the HDMI/DP/VGA video cables between the monitor's HDMI/DP/VGA input connectors and your HDMI/DP/VGA video source. Tighten the video cable's screws for best performance on VGA connector.
2. Connect the USB touch cable between the monitor's USB connector and your PC's USB port.  
\* Or Connect the Serial touch cable between the monitor's COM (Serial) connector and your PC's COM (Serial) port.
3. Connect a 12VDC power supply to the monitor's input power jack.

## Installing the Touch Technology Software Drivers

No additional drivers are required for your projected-capacitive touchscreen displays with Windows 7 ,8.1 and 10 or later operating systems, it uses Windows HID drivers. If the monitor is used with Windows XP operating system, follow below steps to install Windows XP touch driver.

To download the latest touch drivers

Please request the latest touch screen driver from Dignity according to the operating system.

# Operation

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## Power

The touch monitor ships in an ON state.

To turn the touch monitor on or off, press the touch monitor power button on the OSD controller once.

The power status LED on the OSD controller functions according to the following table:

touch monitor/Computer Module Status	LED Status
OFF	OFF
SLEEP	ON
ON	ON

The system consumes low power when in SLEEP and OFF modes.

Touching the screen will bring the attached host PC out of SLEEP mode (similar to moving the mouse or pressing a keyboard key).

To improve reliability and reduce wasteful power consumption, disconnect the AC power cable from the monitor when long periods of disuse are planned.

## Touch

Your touchscreen monitor is factory-calibrated and should not need manual calibration (unless the input video is not fully scaled to the native resolution, or the touch experience needs to be calibrated to a specific user).

## Projected Capacitive Touch

When connected to Windows 7, 8.1 and 10 or later computers, the touch monitor can report 10 simultaneous touches. When connected to Windows XP computers, the touch monitor reports single touch.

No additional drivers are required for this technology to work with Windows 7, 8.1 and 10 or later, it uses Windows HID drivers. Refer to Chapter 2, Section "Installing the Touch Technology Software Drivers" to find instructions to download touch drivers for Windows XP.

## Gesture Support

Microsoft Website <http://msdn.microsoft.com/en-us/library/dd940543> on the various gestures that are supported in Windows 7.

## Video

A display's native resolution is its width and height measured in number of pixels. Generally, for best performance, an image displayed on this monitor will look best when your computer's output resolution matches this monitor's native resolution.

For computer output resolutions at non-native resolutions, the monitor will scale the video to its panel's native resolution. This involves stretching or compressing the input image as needed in the X- and Y-dimensions to fit the display's native resolution. An unavoidable by product of the scaling algorithms is a loss of fidelity when the computer's output video image is scaled by the monitor to fit the display. This loss of fidelity is most apparent when viewing feature-rich images at close distances (for example images containing small-font text).

Your touch monitor will likely not require video adjustments. However, for analog VGA video, variations in video graphic card outputs may require user adjustments through the OSD to optimize the quality of the monitor's displayed image. These adjustments are "remembered" by the touchscreen display. Also, to reduce the need for adjustments for different video mode timings, the monitor correctly scales and displays some of the video industry's most common video timing modes.

## On-Screen Display

Four OSD buttons are located on a wired control box. These can be used to adjust various display parameters. The buttons and their functionality are:

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Button	Function when OSD is not displayed	Function when OSD is displayed
Display OSD Main menu	Display OSD Main menu	Select submenu to enter / select parameter to adjust

LEFT	Display OSD Contrast submenu / reduce brightness	Decrease value of selected parameter / select next menu item
RIGHT	Display OSD Brightness submenu / increase brightness	Increase value of selected parameter / select previous menu item
AUTO	Automatic image adjustment of VGA video	Back to previous menu / Exit OSD setting
POWER	ON/OFF	Shut on/ off

Using the OSD buttons controls an on-screen graphical user interface which displays on top of your input video, allowing intuitive adjustment of the following display parameters:

Parameter	Available Adjustment
Brightness	Increase/decrease monitor brightness. Default: maximum
Contrast	Increase/decrease monitor contrast. Default: best gray-shade performance
Clock	Allow fine adjustments of the panel's pixel dot clock. Only applicable for VGA input video
Phase	Allow fine adjustments of the panel's pixel dot clock phase. Only applicable for VGA input video
Auto Adjust	Automatically adjusts the system clock to the input analog VGA video signal, affecting the H-position, V-position, Clock, and Phase menu items. Only applicable for VGA input video
H-position	Move the image horizontally on the display in single-pixel increments. Default: centered Only applicable for VGA input video
V-position	Move the image vertically on the display in single-pixel increments. Default: centered Only applicable for VGA input video

Parameter	Available Adjustment
Aspect Ratio	<p>Switch the scaling method between Full Scaling and Maintain Aspect Ratio. Default:Wide scaling</p> <p>Wide scaling - scale the X- and Y-dimensions of the input video (up or down as needed) to the display's native resolution. 5:4 – Adjust the aspect ratio of the input video to 5:4 and fill the rest of the display with the same number of black bars on the left and right.</p> <p>4:3– Adjust the aspect ratio of the input video to 4:3 and fill the rest of the display with the same number of black bars on the left and right.</p> <p><i>Other touchscreen technologies may need recalibration when switching between Aspect Ratio options. *this function is available only on wide monitors.</i></p>
Sharpness	<p>Adjust sharpness of the displayed images.</p> <p>Default: no sharpness adjustment</p> <p>Only applicable at non-native input video resolutions.</p>
Color Temperature	<p>Select the display's color temperature. The available color temperatures are 9300K, 7500K, 6500K, 5500K,sRGB and User Defined.If the User Defined option is selected, the user can change the color temperature by changing individual R, G, and B gains on a scale from 0 to 100. Default: User Defined with R, G, and B all set to 50.</p>
OSD H-Position	<p>Adjust the horizontal location of the OSD menus on the display.</p> <p>Default: centered</p>
OSD V-Position	<p>Adjust the vertical location of the OSD menus on the display.</p> <p>Default: centered</p> <p>VGA Priority, DP Priority</p> <p>Default: VGA Priority</p>
Touch on Sleep	<p>Touch function enabled / disabled when the monitor goes into the sleep mode. Default: On</p>

All touchscreen monitor adjustments made through the OSD are automatically memorized as soon as they are entered.This feature saves you from having to reset your choices every time the touchscreen monitor is unplugged or powered off and on. If there is a power failure, the touchscreen display settings will not default to the factory specifications.



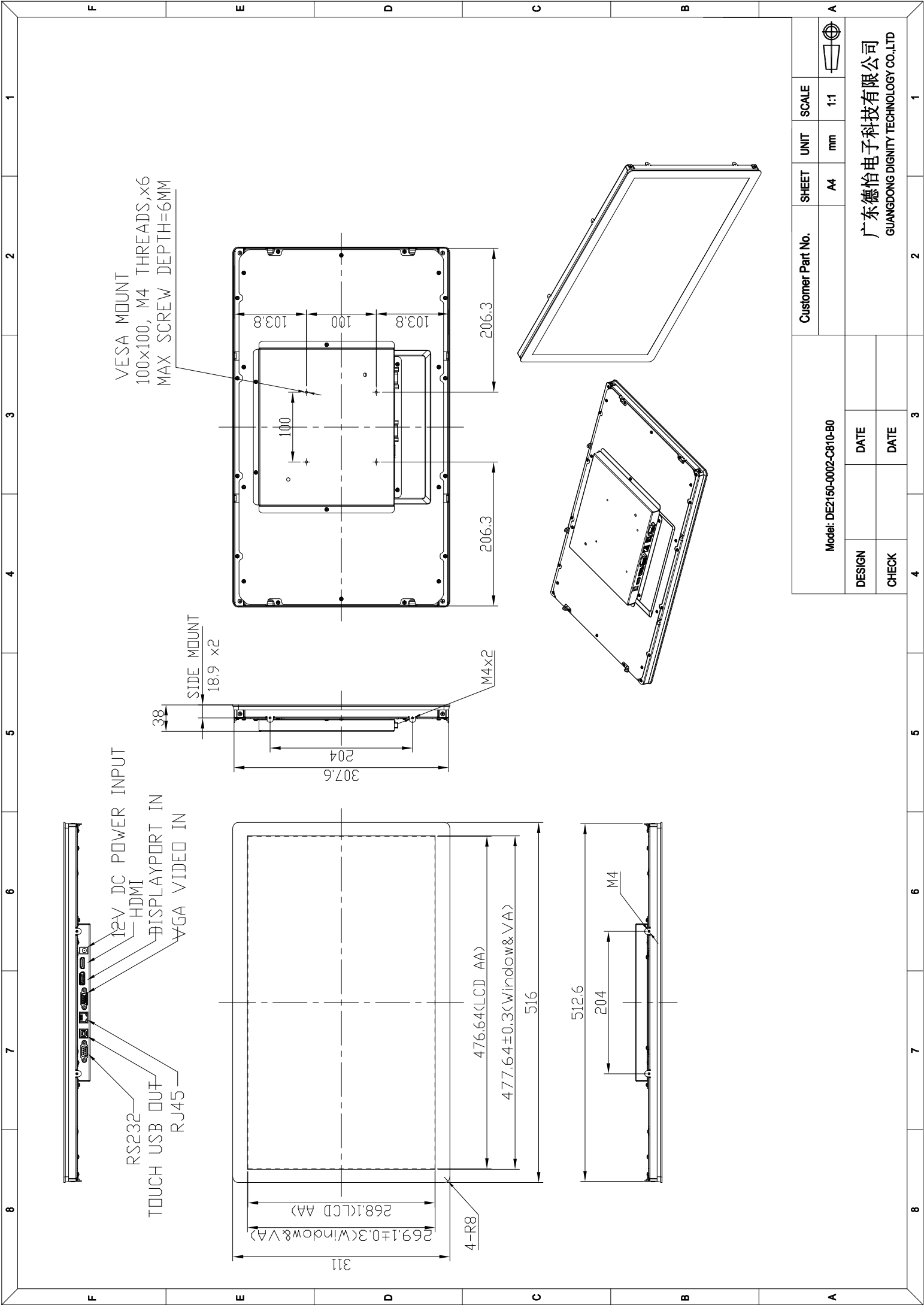
# Technical Support

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If you are experiencing trouble with your touch monitor, refer to the following suggestions. If the problem persists, please contact your local dealer or contact Dignity Customer Service. Worldwide technical support phone numbers are available on the last page of this user manual.

## Solutions to Common Problems

<b>Problem</b>	<b>Suggested Troubleshooting</b>
The touchscreen display does not respond when turning on the system	Check that the DC power adaptor is properly connected Verify the DC power adaptor is functioning
Monitor display is dim	Use the OSD to increase the brightness. Use the OSD to increase the contrast
Monitor display is black	If the Power Status LED is blinking, the monitor or Computer Module may be in SLEEP mode touch the touchscreen to see if the image reappears
Monitor display image looks strange	Adjust your computer's resolution/timing mode to be within the allowable timing ranges specified for your touchscreen display Use the Auto Adjust function in the OSD
Touch functionality doesn't work	Verify your PC has the latest PCAP drivers installed, Perform PCAP latest drivers
The OSD buttons or power button does not respond when pressed	Check if the OSD cable is loose
Can't wake on touch	Check to see if the OSD touch is supported



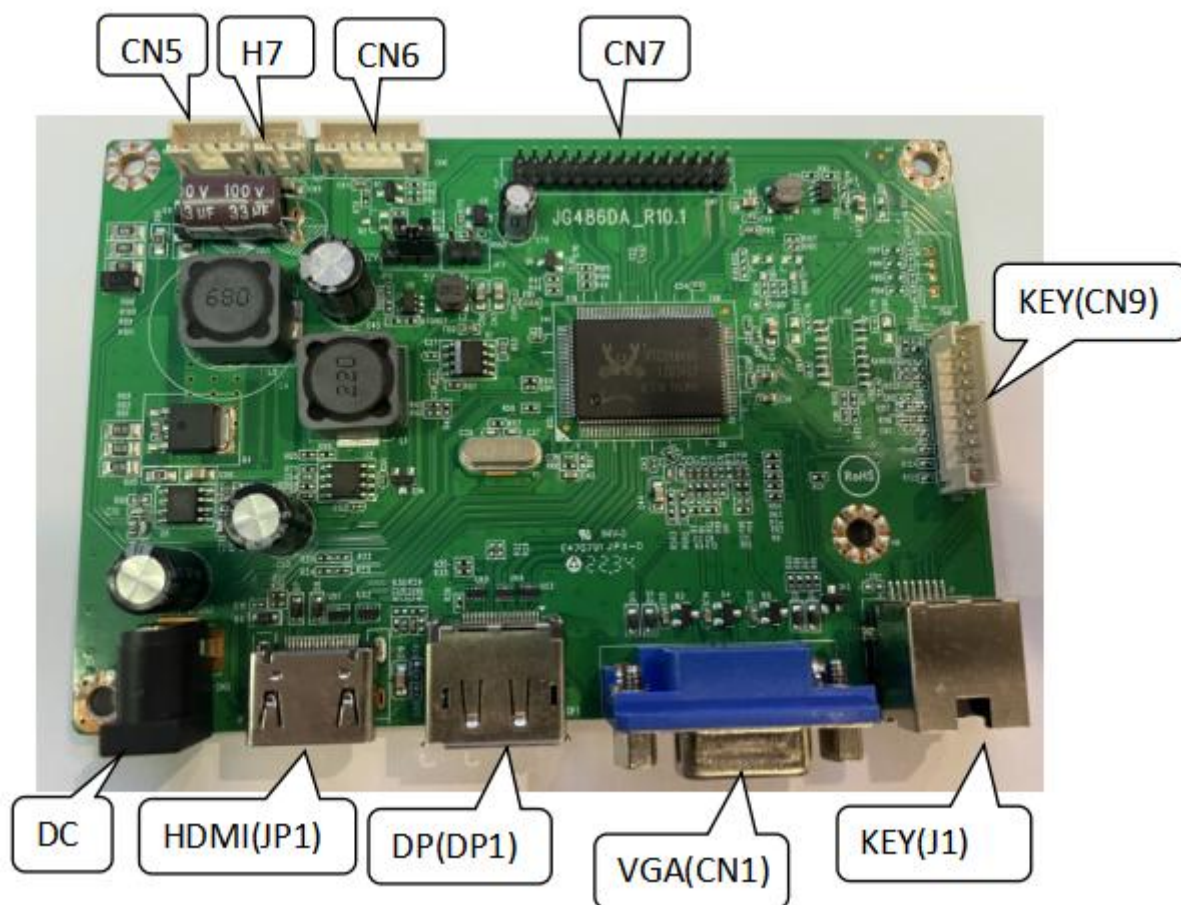
Customer Part No.		SHEET	UNIT	SCALE								
		A4	mm	1:1								
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1	2	3	4	5	6	7	8					



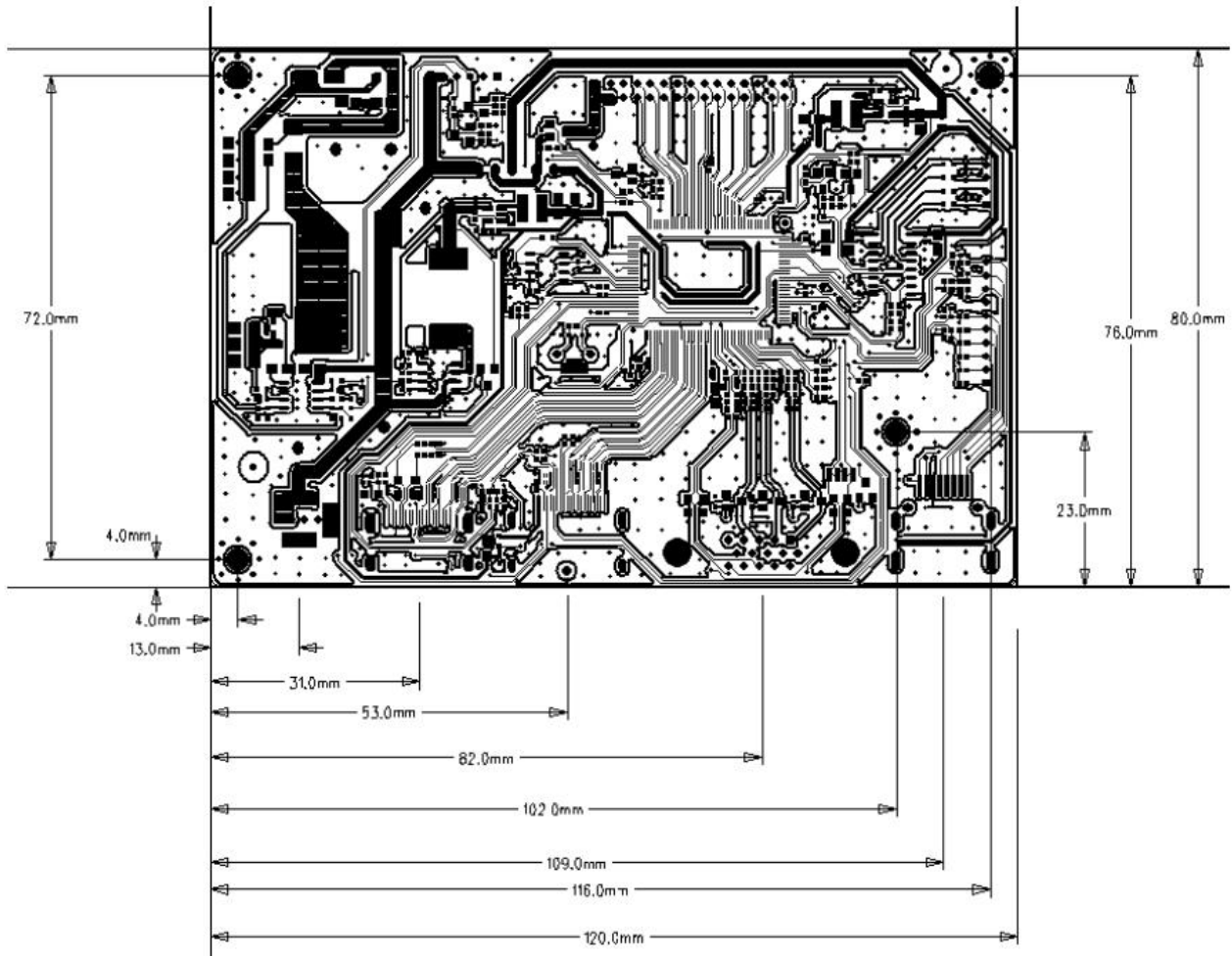
1024*768(XGA)	48.4	60
	56.5	70
	60.0	75
800*600(SVGA)	37.9	60
	48.1	72
	46.9	75
640*480 (VGA)	31.5	60
	37.9	72
	37.5	75

### Mechanical Description

- Dimensions: 120x80mm (L x W)
- Screw Hole: 3.5mm×4



## 4. PCB Dimensions





[www.dignity-eu.com](http://www.dignity-eu.com)

