

# PK2070-31ST-P1Q1

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# Product Specification

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<b>Touch</b>	Resistivo
<b>Feature</b>	-
<b>Performance</b>	-
<b>Inch</b>	7,0"
<b>Form Factor</b>	16:10
<b>Display</b>	LCD
<b>Resolution</b>	800 x 480
<b>Colors</b>	16bit
<b>LCD view angles (T/B/L/R)</b>	-
<b>Brightness</b>	350cd/m2
<b>Backlight</b>	LED
<b>Display life</b>	20000h
<b>CPU</b>	RISC ARM9 300MHz
<b>RAM</b>	64MB
<b>Storage</b>	64MB
<b>Battery backup Memory</b>	128KB
<b>RTC</b>	Built in
<b>SD card</b>	-
<b>Ethernet</b>	1x 10/100Mb/s
<b>USB Host</b>	USB Type A
<b>Programming port</b>	USB Type B
<b>COM 1</b>	RS232

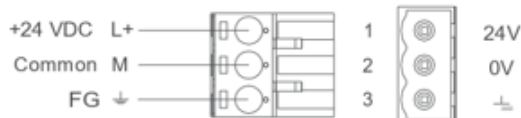
<b>COM 2</b>	RS422/485
<b>COM 3</b>	RS485
<b>COM 4</b>	-
<b>COM 5</b>	-
<b>Power Supply</b>	24Vdc $\pm$ 10% (isolated)
<b>Power Consumption</b>	20W
<b>Storage Temperature</b>	-10 ~ 60°C
<b>Operating Temperature</b>	-10 ~ 60°C
<b>Relative Humidity</b>	10 - 90%RH (non-condensate)
<b>Vibration</b>	Random vibration 1Grms (5 ~ 500Hz)
<b>Protection Degree (Front)</b>	IP65
<b>Protection Degree (Back)</b>	IP20
<b>Lightning</b>	-
<b>Case Material</b>	ABS
<b>Mounting</b>	Panel-Mount
<b>Cutout</b>	191,5 x 138mm
<b>Dimension</b>	204,4 x 151 x 33mm
<b>Weight</b>	550g
<b>CE</b>	EN61000-6-2, EN61000-6-4
<b>RoHS</b>	Compliant
<b>UL</b>	-





### Power Supply

Powered by a Low Voltage / Limited Energy power source.



Do not open the rear cover of the panel when power is applied.

Be sure that the power supply has enough power capacity for the operation of the equipment.

### Dispose of batteries



Dispose of batteries according to local regulations.

The products have been designed for use in an industrial environment in compliance with the 2014/30EU directive.

The products have been designed in compliance with:

- EN 61000-4-4: 2007 + A1: 2011
- EN 61000-3-2: 2014
- EN 61000-3-3: 2013
- EN 61000-6-2: 2005 / AC: 2005
- IEC 61000-4-2: 2008; IEC 61000-4-3: 2008 + A1: 2007 + A2: 2010;
- IEC 61000-4-4: 2012; IEC 61000-4-6: 2014; IEC 61000-4-6: 2013;
- IEC 61000-4-8: 2010; IEC 61000-4-11: 2004 + A1: 2017

The installation of these devices into the residential, commercial and light-industrial environments is allowed only in the case that special measures are taken in order to get the conformity to IEC-61000-6-3. Reproduction of the contents of this copyrighted document, in whole or part without written permission of Cerate Technologies Inc., is prohibited.

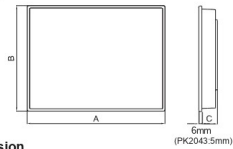
### Connections

PKQ043	21ST/ 31ST/ 41ST	COM1 & COM3 5 Pin Terminal	
	31ST	COM2 5 Pin Terminal	
	41ST (Optional)	COM2 & COM4 5 Pin Terminal	

PK2070 & PK2080 & PK2100 & PK2104 & PK2120 & PK2121 & PK2150	31ST/ 51ST/ 51RT	COM1 & COM2 & COM3 DB-9-Female	<table border="1"> <thead> <tr> <th>Pin</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>RS422 TXD+ / RS485+ (COM2)</td></tr> <tr><td>2</td><td>RS232 RXD (COM1)</td></tr> <tr><td>3</td><td>RS232 TXD (COM1)</td></tr> <tr><td>4</td><td>RS422 RXD+ (COM2)</td></tr> <tr><td>5</td><td>5V</td></tr> <tr><td>6</td><td>RS422 TXD- / RS485- (COM2)</td></tr> <tr><td>7</td><td>RS485- (COM3)</td></tr> <tr><td>8</td><td>RS485+ (COM3)</td></tr> <tr><td>9</td><td>RS422 RXD- (COM2)</td></tr> </tbody> </table>	Pin	Description	1	RS422 TXD+ / RS485+ (COM2)	2	RS232 RXD (COM1)	3	RS232 TXD (COM1)	4	RS422 RXD+ (COM2)	5	5V	6	RS422 TXD- / RS485- (COM2)	7	RS485- (COM3)	8	RS485+ (COM3)	9	RS422 RXD- (COM2)
	Pin	Description																					
	1	RS422 TXD+ / RS485+ (COM2)																					
2	RS232 RXD (COM1)																						
3	RS232 TXD (COM1)																						
4	RS422 RXD+ (COM2)																						
5	5V																						
6	RS422 TXD- / RS485- (COM2)																						
7	RS485- (COM3)																						
8	RS485+ (COM3)																						
9	RS422 RXD- (COM2)																						
51ST (Optional)	COM1 & COM5 5 Pin Terminal																						
51RT (Optional)	COM1 & COM5 5 Pin Terminal																						

### PK2 Ethernet Series HMI Panels

#### Outlet Dimension

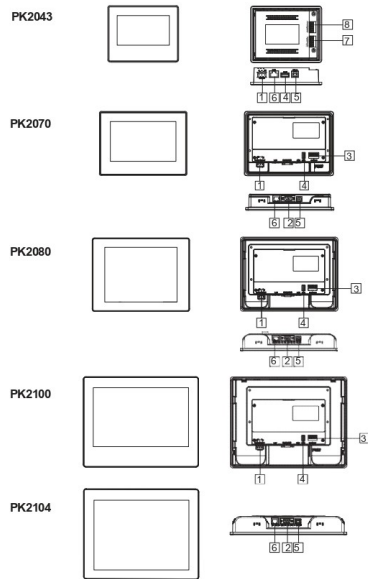


#### Cut Out Dimension



Model	A	B	C*	L	H
PK2043	129mm/5.08"	103mm/4.06"	33mm/1.30"	118.5mm/4.67"	92.5mm/3.64"
PK2070	203.5mm/8.01"	148.5mm/5.85"	37mm/1.46"	191.5mm/7.54"	138mm/5.43"
PK2080	233mm/9.17"	176mm/6.93"	42.2mm/1.66"	221mm/8.70"	163.5mm/6.44"
PK2100 / PK2104	270.8mm/10.66"	212.8mm/8.38"	42.5mm/1.67"	259mm/10.2"	201mm/7.91"
PK2120 / PK2121	335.4mm/13.20"	245.9mm/9.68"	58.2mm/2.29"	302mm/11.89"	228mm/8.98"
PK2150	399.1mm/15.71"	297.6mm/11.72"	57.5mm/2.26"	384.5mm/15.14"	283mm/11.14"

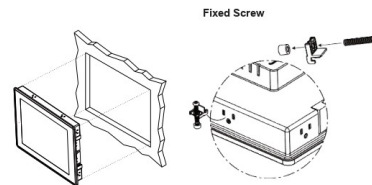
#### Function View



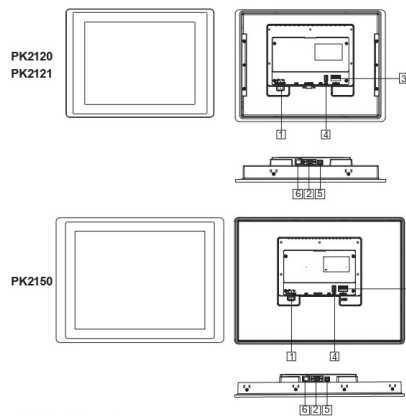
**⚠** These devices are only suitable for software 2.1.9.26 or higher version.

#### Installation Drawing

#### Metal Locks



**⚠** Tighten each fixing screw until the bezel corner gets in contact with the panel.



- 1 Power Connector
- 2 COM1&2&3 9Pin Female
- 3 COM4&5 5Pin Terminal(Optional)
- 4 USB Host
- 5 USB Client
- 6 Ethernet Port
- 7 COM1&3 5Pin Terminal
- 8 COM2 5Pin Terminal
- 9 COM2&4 5Pin Terminal(Optional)