

# 10.4" SVGA Industrial Display kit with Touch Solution



#### **Features**

- = 10.4" LCD supports 800 x 600 pixels and wide operating temperature (-10  $\sim 60^{\circ}$  C)
- Brightness of 400 cd/m² with LED backlight
- 4-wire resistive touch solution
- High contrast ratio of 700:1
- High uniformity of 75%
- LVDS signal interface
- Low power consumption 2.88 W (panel only)
- LED driver board built in
- Touch controller included (USB)
- Anti-Reflection surface treatment (optional)
- Optical bonding (optional)

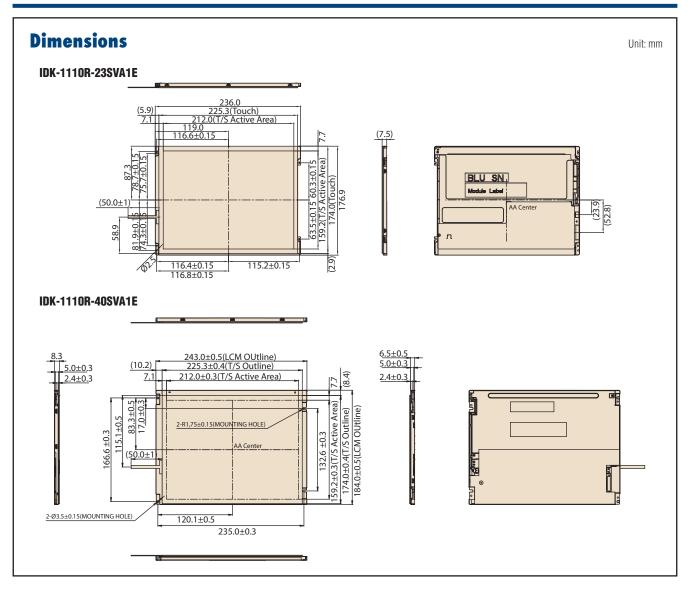


#### Introduction

The Advantech IDK-1110 series comes with a 10.4" industrial grade LCD display with 4-wire resistive touch. The series is also available with flexible options for LCD screens enhanced treatment such as Anti-Reflection surface treatment and optical bonding solution. IDK-1110 series supports 4-wire resistive touch with low power consumption at the maximum of 2.88 W. IDK-1110 series is ideal for embedded applications which customers have maximum flexibility for mechanical design.

### **Specifications**

Model   IDK-1110R-23SVA1E   IDK-1110R-40SVA1E     Size	<del>-</del>			
Resolution   800 x 600   800 x 600     Viewing Angle (U/D/L/R)   60° / 70° / 80° / 80°   60° / 70° / 80° / 80°     Brightness   230 cd/m²   400 cd/m²     Backlight Life (hrs)   30,000 hrs   50,000 hrs     Contrast Ratio   500 : 1   700 : 1     Response Time (ms)   35 ms   15 ms     Colors   6 Bit (262K)/8 bit (16.2 M)   6 Bit (262K)/8 bit (16.2 M)     Voltage   3.3 V Power   3.3 V Power     Consumption   3.5 W   2.88 W     Signal Interface   1 channel LVDS   1 channel LVDS     Weight   470 g   530 g     Dimensions (W x H x D)   236 x 176.9 x 7.5 mm   243 x 184 x 8.3 mm     Touch Screen   4-wire Resistive   4-wire Resistive     Transparency   82.5%   82.5%     Surface Hardness   3H   3H     Durability   1 million times   1 million times     Operating Temperature   -10 ~ 60° C   -10 ~ 60° C     Environment   Storage Temperature   -20 ~ 70° C   -30 ~ 70° C		Model	IDK-1110R-23SVA1E	IDK-1110R-40SVA1E
Viewing Angle (U/D/L/R)   60° / 70° / 80° / 80°   60° / 70° / 80° / 80°     Brightness   230 cd/m²   400 cd/m²     Backlight Life (hrs)   30,000 hrs   50,000 hrs     Contrast Ratio   500 : 1   700 : 1     Response Time (ms)   35 ms   15 ms     Colors   6 Bit (262K)/8 bit (16.2 M)   6 Bit (262K)/8 bit (16.2 M)     Voltage   3.3 V Power   3.3 V Power     Consumption   3.5 W   2.88 W     Signal Interface   1 channel LVDS   1 channel LVDS     Weight   470 g   530 g     Dimensions (W x H x D)   236 x 176.9 x 7.5 mm   243 x 184 x 8.3 mm     Touch Screen   4-wire Resistive   4-wire Resistive     Transparency   82.5%   82.5%     Surface Hardness   3H   3H     Durability   1 million times   1 million times     Centure Touch Storage Temperature   -10 ~ 60° C   -10 ~ 60° C     Environment   Storage Temperature   -20 ~ 70° C   -30 ~ 70° C     Centure Touch Screen   4-wire Temperature   -20 ~ 70° C   -30 ~ 70° C     Centure Touch Screen   -20 ~ 70° C   -30 ~ 70° C     Centure Touch		Size	10.4" LED backlight panel	10.4" LED backlight panel
Brightness   230 cd/m²   400 cd/m²		Resolution	800 x 600	800 x 600
Backlight Life (hrs)   30,000 hrs   50,000 hrs		Viewing Angle (U/D/L/R)	60° / 70° / 80° / 80°	60° / 70° / 80° / 80°
LCD Panel         Contrast Ratio         500:1         700:1           Response Time (ms)         35 ms         15 ms           Colors         6 Bit (262K)/8 bit (16.2 M)         6 Bit (262K)/8 bit (16.2 M)           Voltage         3.3 V Power         3.3 V Power           Consumption         3.5 W         2.88 W           Signal Interface         1 channel LVDS         1 channel LVDS           Weight         470 g         530 g           Dimensions (W x H x D)         236 x 176.9 x 7.5 mm         243 x 184 x 8.3 mm           Touch Screen         4-wire Resistive         4-wire Resistive           Transparency         82.5%         82.5%           Surface Hardness         3H         3H           Durability         1 million times         1 million times           Operating Temperature         -10 ~ 60° C         -10 ~ 60° C           Environment         Storage Temperature         -20 ~ 70° C         -30 ~ 70° C		Brightness	230 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>
Response Time (ms)   35 ms   15 ms	LCD Panel	Backlight Life (hrs)	30,000 hrs	50,000 hrs
Response Time (ms)   35 ms   15 ms		Contrast Ratio	500 : 1	700 : 1
Voltage         3.3 V Power         3.3 V Power           Consumption         3.5 W         2.88 W           Signal Interface         1 channel LVDS         1 channel LVDS           Weight         470 g         530 g           Dimensions (W x H x D)         236 x 176.9 x 7.5 mm         243 x 184 x 8.3 mm           Touch Screen         4-wire Resistive         4-wire Resistive           Transparency         82.5%         82.5%           Surface Hardness         3H         3H           Durability         1 million times         1 million times           Operating Temperature         -10 ~ 60° C         -10 ~ 60° C           Environment         Storage Temperature         -20 ~ 70° C         -30 ~ 70° C		Response Time (ms)	35 ms	15 ms
Consumption         3.5 W         2.88 W           Signal Interface         1 channel LVDS         1 channel LVDS           Weight         470 g         530 g           Dimensions (W x H x D)         236 x 176.9 x 7.5 mm         243 x 184 x 8.3 mm           Touch Screen         4-wire Resistive         4-wire Resistive           Transparency         82.5%         82.5%           Surface Hardness         3H         3H           Durability         1 million times         1 million times           Operating Temperature         -10 ~ 60° C         -10 ~ 60° C           Environment         Storage Temperature         -20 ~ 70° C         -30 ~ 70° C		Colors	6 Bit (262K)/8 bit (16.2 M)	6 Bit (262K)/8 bit (16.2 M)
Signal Interface		Voltage	3.3 V Power	3.3 V Power
Weight Dimensions (W x H x D)         470 g         530 g           Dimensions (W x H x D)         236 x 176.9 x 7.5 mm         243 x 184 x 8.3 mm           Touch Screen         4-wire Resistive         4-wire Resistive           Transparency         82.5%         82.5%           Surface Hardness         3H         3H           Durability         1 million times         1 million times           Operating Temperature         -10 ~ 60° C         -10 ~ 60° C           Environment         Storage Temperature         -20 ~ 70° C         -30 ~ 70° C		Consumption	3.5 W	2.88 W
Dimensions (W x H x D)   236 x 176.9 x 7.5 mm   243 x 184 x 8.3 mm		Signal Interface	1 channel LVDS	1 channel LVDS
Touch Screen   4-wire Resistive   4-wire Resistive		Weight	470 g	530 g
Touch Screen         Transparency         82.5%         82.5%           Surface Hardness         3H         3H           Durability         1 million times         1 million times           Operating Temperature         -10 ~ 60° C         -10 ~ 60° C           Environment         Storage Temperature         -20 ~ 70° C         -30 ~ 70° C		Dimensions (W x H x D)	236 x 176.9 x 7.5 mm	243 x 184 x 8.3 mm
Durability         1 million times         3H           Operating Temperature         -10 ~ 60° C         -10 ~ 60° C           Environment         Storage Temperature         -20 ~ 70° C         -30 ~ 70° C	Touch Screen	Touch Screen	4-wire Resistive	4-wire Resistive
Surface Hardness         3H         3H           Durability         1 million times         1 million times           Operating Temperature         -10 ~ 60° C         -10 ~ 60° C           Environment         Storage Temperature         -20 ~ 70° C         -30 ~ 70° C		Transparency	82.5%	82.5%
Operating Temperature -10 ~ 60° C -10 ~ 60° C  Environment Storage Temperature -20 ~ 70° C -30 ~ 70° C		Surface Hardness	3H	3H
Environment Storage Temperature -20 ~ 70° C -30 ~ 70° C		Durability	1 million times	1 million times
	Environment	Operating Temperature	-10 ~ 60° C	-10 ~ 60° C
Humidity 90% @ 39° C, non-condensing 90% @ 39° C, non-condensing		Storage Temperature	-20 ~ 70° C	-30 ~ 70° C
		Humidity	90% @ 39° C, non-condensing	90% @ 39° C, non-condensing



## **Ordering Information**

Part No.	Size	Brightness (cd/m²)	Interface	Touch screen	Touch Interface
IDK-1110R-23SVA1E (Economical)	10.4"	230	LVDS	4-wire Resistive	USB
IDK-1110R-40SVA1E	10.4"	400	LVDS	4-wire Resistive	USB

## **Packing List**

Part Number	Description	
ETM-RES05C-EEH4EE	1 x 4-wire USB Touch controller	
1700020324-01	1x USB Touch cable 5P-2.0/USB-A (M) 180CM	

Note: Package contents are subject to change without prior notice

## **Optional Order**

SBC Part No.	LVDS cable P/N	Display interface	B/L cable P/N	Touch interface	Touch power input
MIO-5270	96CB-L2040PAC4	Single channel 18bit LVDS (SVGA)	96CB-E0505PAC3	USB	5V
PCM-9362	96CB-L2020PAC2	Single channel 18bit LVDS (SVGA)	96CB-E0505PAC3	USB	5V
AIMB-270	96CB-L2040PAC4	Single channel 18bit LVDS (SVGA)	96CB-E0505PAC3	USB	5V

For more compatible embedded board solution, please visit our Build Your display web page as bellow <a href="http://www.advantech.com/buildyourdisplay">http://www.advantech.com/buildyourdisplay</a>