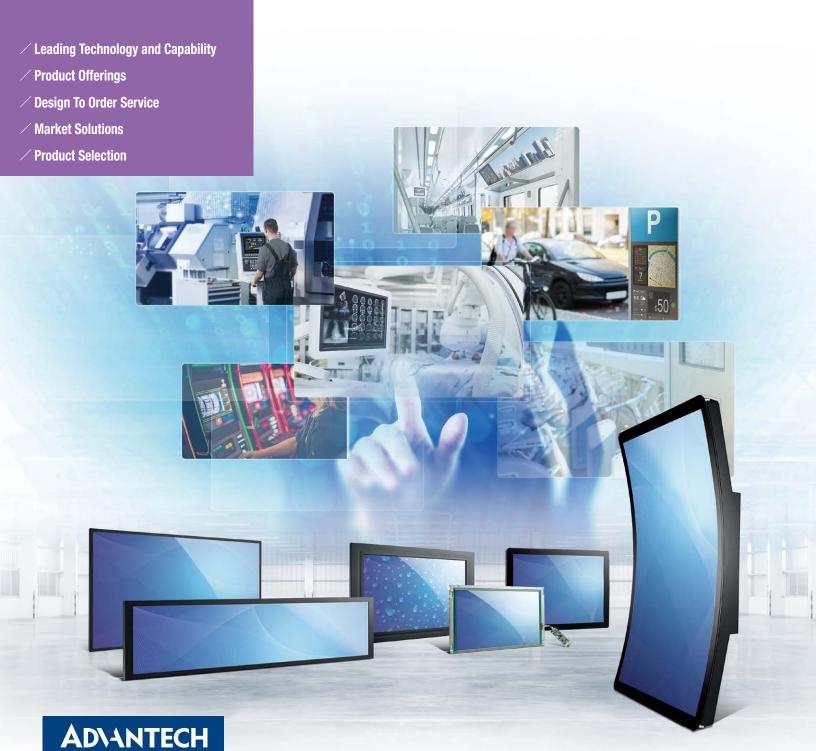
# **Industrial Display Systems**

**Leading Professional Display Expert** 

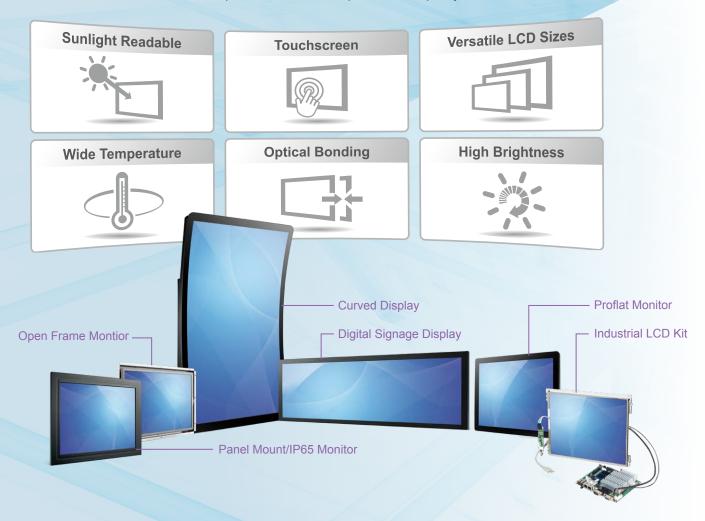


Enabling an Intelligent Planet

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# **Advantech Industrial Display Systems**

Advantech designs, develops and manufactures display systems that meet the demands of industrial display markets in gaming, transportation, medical, and many system integration markets globally. Combining proven technologies and flexible manufacturing, Advantech creates class leading solutions for your customers that deliver significant product differentiation and competitive advantage. Our customer-centric approach reinforces all of our activities and is an essential part of the thousands of products we ship daily.



## **In-house Design and Manufacturing Capabilities**

Advantech is committed to developing new industrial display technologies and has built class 1,000/10,000 LCD clean rooms with ISO certification to develop our own display technologies in Taiwan, China and North America. With monthly capacities of 30,000 pieces and all capabilities in-house, we bring high add-on value, quality and reliability to our industrial display products.





Class 10,000 Clean-room



**Professional Engineers** 



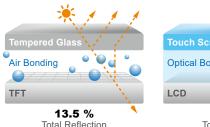
Value-added Services

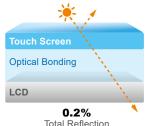


**Assured Quality** 

## **Optical Bonding**

Optical bonding technology is to inject optical glue into the space between a cover glass and the LCD panel to remove the air gap. Advantech develops both Wet Bond and Dry Bond technologies to enhance the LCD readability and durability.





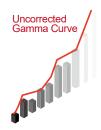
## **High Brightness**

With in-house LED light bar design and optical films, our solution can boost brightness up to 2000 nits with a low-power backlight source saving about 20% less energy than competing products with the same level of brightness.



## **Medical Imaging**

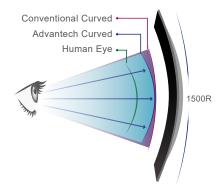
Our solutions include IPS displays and AD boards with color management functions which help improve brightness stability, gray scale, color temperature and color gamut and are fully compliant with the DICOM standard.





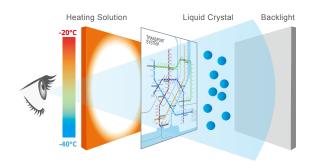
## **Curved Display**

Advantech curved display technology is available with a variety of radius of concave or convex surface such as 1500R or 1200R. Packaged together with an industrial grade video card and power supply, our solution is available with standard video inputs and can be specified with or without 10-point-touch overlay.



## **Wide Temperature**

Advantech Thermal Impedance Solution uses a heating film an in-house intelligent AD board to control the temperature of the TFT-LCD, so that the display works normally even under extreme environments.





#### **Key Features**



## **Proven Compatibility**

All Advantech IDK series are tested to be compatible with all Advantech embedded boards with LVDS cables, ready VBIOS and touch driver support.



## **Enhanced Readability**

IDK-2000 provides 1200 cd/m² brightness to withstand the ambient sunlight (normally 10,000 nits) and guarantees excellent visibility with low power consumption.



## **User-friendly Interface**

The IDK series are pre-integrated with touchscreen to deliver user-friendly interface with both single/multi touch options.



#### **Key Features**



#### **Ultra-slim Design**

Featuring an ultra-slim and compact profile, the Advantech IDS monitors measure 20% less than market average for easy integration



#### **Flexible Mount**

The IDS-3000 series support flexible rear/ front/ wall/ stand mount with VESA mounting interface standard.



### **Dust/Humidity Protection(IP65)**

The IDS-3300 series are designed with IP65 certified enclosures to ensure stable operation in harsh environments.



#### **Key Features**



## Portrait & Landscape Modes

Our monitors enable you to display content in both portrait and landscape modes.



### **Super Wide Ratio**

The DSD-5000 series allow for maximize available space and dynamic scenarios with ultra wide ratio design.



## Triptic<sup>™</sup> Function Built-in

The CRV series are built-in with Triptics which allows customers to define their user zones up to 3 inputs via HDMI and DisplayPort without the need for changes to game software.



#### **Optical Engineering**

- Backlight design
- Optical bonding
- Brightness enhancement
- Thermal control



#### **Mechanical/ Material Engineering**

- Chassis, glass, polymers, adhesives, light guides
- Open, Closed Frame, Proflat designs
- Panel cutting
- IP54/IP65 solution



#### **System Integration Service**

- X86/RISC computing
- Touchscreen/button integration
- BIOS customization

#### **Key Applications**

Our teams develop hundreds of new designs each year and are veterans of many demanding applications such as:



### **Transportation**

- Ticketing kiosk
- Passenger information signage
- Marine



#### **Medical Ultrasonic**

- Ultrasound
- Clinical equipment
- Surgical imaging



#### • Quick service kiosk

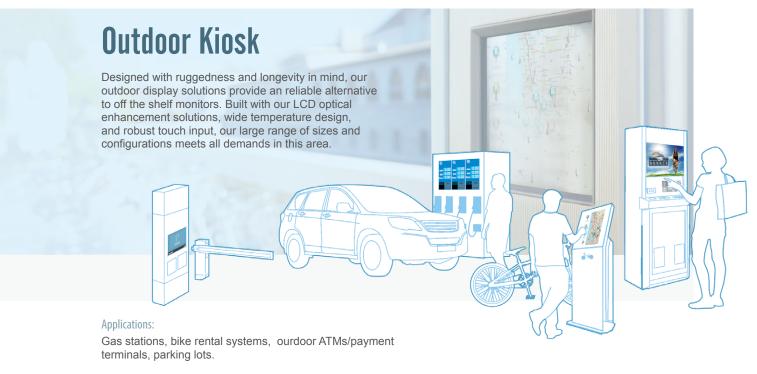
Outdoor digital signage



## **Vending Machine**

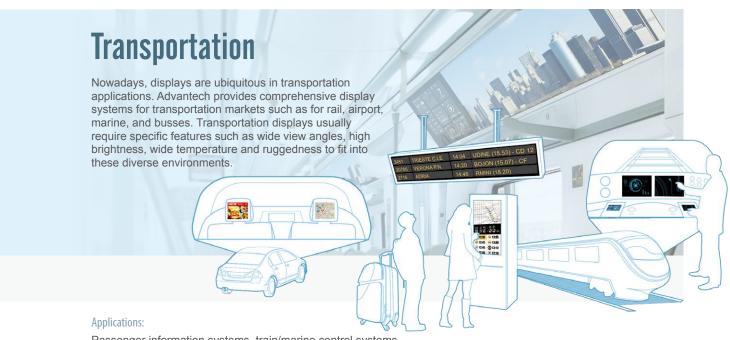
- Point of sales
- Digital signage

# **Focused Applications**



**Suitable Solutions:** 

IDK-2000, IDS-3000 series, optical bonding, high brightness



Passenger information systems, train/marine control systems, taxi advertising screen, in-flight entertainment systems

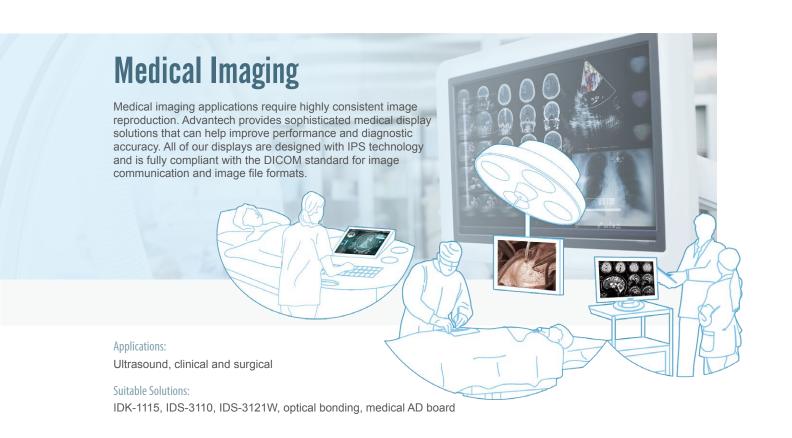
**Suitable Solutions:** 

IDS-3000 series, DSD-5000 series, optical bonding, high brightness



#### **Suitable Solutions:**

Main display- CRV-430, IDS-3121W, Button deck- IDP31-190 / Player tracker- DSD-5000 series , LED strip lighting customization



# **Selection Guide**

## **Industrial Display Kit IDK-1000 Series**

	IDK-1105	IDK-065		IDK-1107W		IDK-1108	IDK-1	110W	IDK-:	L110
Size	5.7"	6.5"		7"		8.4"	10.	1"	10.	4"
Resolution	640 x 480 (VGA)	640 x 480 (VGA)	800 x 480 (WVGA)	1024 x 600 (WSVGA)	1024 x 600 (WSVGA)	800 x 600 (SVGA)	1024 x600 (WSVGA)	1280 x 800 (WXGA)	800 x 600 (SVGA)	1024 x 768 (XGA)
Brightness (cd/m²)	500	800	400	400	500	450	550	500	400	500
Viewing Angle (H/V°)	140/100	160/140	160/160	150/145	140/120	160/140	120/140	170/170	160/130	176/176
Contrast Ratio	250:1	600:1	750:1	700:1	600:1	600:1	500:1	800:1	700:1	1000:1
Touchscreen	4-Wire Resistive	4-Wire Resistive	4-Wire Resistive	4-Wire Resistive	P-cap	4-Wire Resistive	4-Wire Resistive	P-cap	4-Wire Resistive	P-cap
Signal Interface	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS
Backlight Life (hrs)	30,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Durability (touches)	1 million	1 million	1 million	1 million	50 million ~	1 million	1 million	50 million ~	1 million	50 million ~
Operating Temperature	-20 ~ 70°C	-10 ~ 60°C	-5 ~ 60°C	-20 ~ 70°C	-20 ~ 70°C	-10 ~ 60°C	-5 ~ 60°C	-20 ~ 65°C	-10 ~ 60°C	-20 ~ 70°C

	IDK-1112		IDK-1115	IDK-1115WP		IDK-1119	IDK-1121W	
Size	12	.1"	15"	15.6"		19"	21	.5"
Resolution	800 x 600 (SVGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1366x768 (WXGA)	1920 x 1080(FHD)	1280 x 1024 (SXGA)	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Brightness (cd/m²)	450	500	500	500	450	350	300	250
Viewing Angle (H/V°)	160/140	178/178	178/178	160/150	170/170	170/160	178/178	178/178
Contrast Ratio	700:1	1000:1	2500:1	600:1	800:1	1000:1	5000:1	1000:1
Touchscreen	5-Wire Resistive	5-Wire Resistive and P-cap	5-Wire Resistive and P-cap	P-cap	P-cap	5-Wire Resistive	5-Wire Resistive	P-cap
Signal Interface	LVDS	LVDS	LVDS	LVDS	2 Channel LVDS	2 Channel LVDS	2 Channel LVDS	2 Channel LVDS
Backlight Life (hrs)	50,000	30,000	70,000	50,000	50,000	50,000	50,000	30,000
Durability (touches)	10 million	10 / 50 million ~	10 / 50 million ~	50 million ~	50 million ~	10 million	10 million	50 million ~
Operating Temperature	-20 ~ 70°C	-20 ~ 70°C	-20 ~ 70°C	-10 ~ 70°C	-20 ~ 70°C	0 ~ 50°C	0 ~ 60°C	0 ~ 50°C

### **High Brightness Display Kit IDK-2000 Series**

	IDK-2108	IDK-	2110	IDK-	2112	IDK-2115	IDK-2117	IDK-2119	IDK-2121
Size	8.4"	10	.4"	12	.1"	15"	17"	19"	21.5"
Resolution	800 x 600 (SVGA)	800 x 600 (SVGA)	1024 x 768 (XGA)	800 x 600 (SVGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)	1920 x 1080 (FHD)
Brightness (cd/m²)	1200	1200	1300	1200	1200	1200	1200	1200	1200
Viewing Angle (H/V°)	160/140	160/130	170/170	160/140	178/178	178/178	170/160	170/160	178/178
Contrast Ratio	600:1	500:1	700:1	700:1	1000:1	2500:1	1000:1	1000:1	5000:1
Touchscreen	4-Wire Resistive	4-Wire Resistive	4-Wire Resistive	5-Wire Resistive	P-cap	5-Wire Resistive	5-Wire Resistive	5-Wire Resistive	5-Wire Resistive
Signal Interface	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS	2 Channel LVDS	2 Channel LVDS	2 Channel LVDS
Backlight Life (hrs)	50,000	50,000	70,000	50,000	50,000	50,000	50,000	50,000	50,000
Durability (touches)	1 millions	1 million	1 million	10 million	50 million ~	10 million	10 million	10 million	10 million
Operating Temperature	-20 ~ 70°C	-10~60°C	-10~60°C	-20 ~ 70°C	-20 ~ 70°C	-20 ~ 70°C	0 ~ 50°C	0 ~ 50°C	0 ~ 55°C

#### **Slim Open Frame/Panel Mount Monitors IDS-3000 Series**

	IDS-3106/ IDS-3206	IDS-3110/ IDS-3210	IDS-3112/ IDS-3212	IDS-3115/ IDS-3215	IDS-3117/ IDS-3217	IDS-3118W/ IDS-3218W	IDS-3119/ IDS-3219	IDS-3121W/ IDS-3221
Size	6.5"	10.4"	12.1"	15"	17"	18.5"	19"	21.5"
Resolution	640 x 480, VGA	800 x 600, SVGA and 1024 x 768, XGA	800 x 600, SVGA and 1024 x 768, XGA	1024 x 768, XGA	1280 x 1024, SXGA	1366 x 768, HD	1280 x 1024, SXGA	1920 x 1080, FHD
Brightness (cd/m²)	800	400/500	450/600	400/500 1200	350	300	350	250
Viewing Angle(H/V°)	160/140	160/140	160/140	160/140	170/160	170/160	170/160	178/178
Contrast Ratio	600 : 1	700 : 1	700 : 1	700 : 1	800 : 1	1000:1	1000:1	1000:1
Touchscreen	4-Wire Resistive	5-wire resistive and P-cap	5-wire resistive and P-cap	5-wire resistive and P-cap	5-Wire Resistive	5-wire resistive and P-cap	5-wire resistive and P-cap	5-wire resistive and P-cap
Backlight Life (hrs)	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Durability	1 million touches	10/50 million touches	10/50 million touches	10/50 million touches	10 million touches	10/50 million touches	10/50 million touches	10/50 million touches
Operating Temperature	0 ~ 50° C	- 20 ~ 60° C	- 20 ~ 60° C	- 20 ~ 60° C	- 20 ~ 60° C	0 ~ 55° C	0 ~ 45° C	0 ~ 45° C
I/O Ports	VGA x 1; DVI x 1; 12 VDC Jack x 1; USB x 1	VGA x 1; DVI x 1; HDMI x 1 (selected models); 12 VDC Jack x 1; USB x 1; RS-232 x 1						
OSD		Keys: Power on/off, Menu/Enter, Left/Up, Right/Down, Exit/Auto, Source Menu Functions: Brightness, Contrast, Screen Setting, Color Temp, OSD Language, VGA/DVI, Reset, Auto Adjust						

### **IP65 Monitors IDS-3300 Series**

	IDS-3315	IDS-3319	IDS-3321W		
Size	15"	19"	21.5"		
Resolution	1024 x 768, XGA	1280 x 1024, SXGA	1920 x 1080, FHD		
Brightness (cd/m²)	500 / 1200	350	250		
Viewing Angle (H/V°)	160/140	170/160	178/178		
Contrast Ratio	2500:1	1000:1	1000:1		
Touchscreen	5-wire resistive and P-cap	5-wire resistive and P-cap	5-wire resistive and P-cap		
Backlight Life (hrs)	50,000	50,000	50,000		
Durability	10/50 million touches	10/50 million touches	10/50 million touches		
Operating Temperature	- 20 ~ 60° C	0 ~ 45° C	0 ~ 45° C		
I/O Ports	VGA x 1; DVI x 1; HDMI x 1 12VDC Jack x 1; USB x 1; RS-232 x 1				

## **Configurable Industrial Monitors IDS31 Series**

	IDS31-070W	IDS31-104	IDS31-156W	IDS31-185W	IDS31-190	IDS31-215W	IDS31-230W	IDS31-320W
Size	7" Wide	10.4"	15.6" Wide	18.5" Wide	19"	21.5" Wide	23" Wide 32"	32" Wide
Resolution	800 x 480	800 x 600	1366 x 768	1366 x 768	1280 x 1024	1920 x 1080	1920 x 1080	1920 x 1080
Brightness (cd/m²)	400	230	300	300	350	250	300	350
Viewing Angle (H/V°)	80,80,60,80	60,60,55,45	85,85,80,80	85,85,80,80	85,85,80,80	89,89,89,89	89,89,89,89	89,89,89,89
Contrast Ratio	500 : 1	500:1	500 : 1	1000 : 1	1000:1	5000 : 1	1000 : 1	1000 : 1
Touchscreen	5 wire AR	5 wire AR	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	Surface / Projected Capacitive
Backlight Life (hrs)	50,000	30,000	50,000	50,000	50,000	30,000	30,000	50,000
Operating Temperature	0 ~ +50° C	0 ~ +50° C	0 ~ +50° C	0 ~ +50° C	0 ~ +50° C	0 ~ +50° C	0 ~ +50° C	0 ~ +50° C

## **Digital Signage Displays DSD-3000/5000 Series**

	DSD-3032	DSD-3042	DSD-3055	DSD-5028	DSD-5038
Size	32"	42"	55"	28"	38"
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 358	1920 x 538
Brightness (cd/m²)	350	500	450	700	800
Viewing Angle (H/V°)	178/178	178/178	178/178	178/178	176/176
Contrast Ratio	3000:1	4000:1	4000:1	3000:1	4000:1
Touchscreen	Optical Touch	Optical Touch	Optical Touch	N/A	N/A
Signal Interface	HDMI/VGA/ DisplayPort	HDMI/VGA/ DisplayPort	HDMI/VGA/ DisplayPort	VGA/DVI	VGA/DVI
Backlight Life (hrs)	50,000	50,000	50,000	50,000	50,000
Durability	10 million touches	10 million touches	10 million touches	N/A	N/A
Operating Temperature	5 ~ 45° C	5 ~ 45° C	5 ~ 45° C	0 ~ 45° C	0 ~ 45° C

#### **Ultra Thin Proflat Monitors IDP31 Series**

	IDP31-150	IDP31-156W	IDP31-215W
Size	15"	15.6"	21.5" Wide
Resolution	1024 x 768	1920 X 1080	1920 x 1080
Brightness (cd/m²)	500	450	250
Viewing Angle (H/V°)	160 / 140	170 / 170	178 / 178
Contrast Ratio	2500:1	800:1	1000 : 1
Touchscreen	P-cap	P-cap	P-cap
Backlight Life (hrs)	50,000	50,000	50,000
Durability	50 million touches	50 million touches	50 million touches
Operating Temperature	-20 ~ 60	-20 ~ 60	0 ~ 45

## **Cureved Display CRV Series**

	CRV-430WP	CRV-430JP			
Size	43" C type	43" J type			
Resolution	3840 x 2160 UHD				
Brightness (cd/m²)	450				
Contrast Ratio	1100:1 (8ms)				
Curved Radius	1500				
Touchscreen	Multi-touch PCT(10 touches)				
Cover Glass	4mm				
Operating Temperature	0 ~ 50° C				
I/O Ports	HDMI 1.4 (2 ports), HDMI 2.0 (2 ports), DisplayPort, VGA				

## Your Industrial Displays Expert



**Industrial Grade and** Quality

Advantech provides industrial grade display solutions for industrial usages which require more rugged specification and high quality.



Extended Longevity and Warrantv



Global Capacity and **Local Service** 

We offer 2 years of product longevity and warranty. Extended warranty between 3-5 years is also available.

Advantech provides display systems globally with three manufacturing centers in Taiwan, China and USA and branch offices in 23 countries to better service customers.

#### **Regional Service & Customization Centers**

China Kunshan 86-512-5777-5666

**Taiwan** | Taipei 886-2-2792-7818

Netherlands Eindhoven 31-40-267-7000

Poland | Warsaw 00800-2426-8080

**USA** | Milpitas, CA 1-408-519-3898

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Vietnam

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