

Industrial Panel PCs & Displays

Our Rugged Industrial Panel PCs and Displays Empower Your Productivity



Our Rugged Industrial Panel PCs Empower Your Productivity

We provide diverse panel PCs with advanced display technologies to ensure stable performance in industrial environments. Equipped with our motherboard, this product family possesses high stability and reliability to fulfilling your various requirements in various industry fields.

Industrial Panel PCs & Displays Overview

Fanless Touch Panel PC



KS156-AL

Intel Atom® Processor x6000 / Celeron	P7-12
21.5": KSX215P-EHL, KS215P-EHL	
15.6": KSX156P-EHL, KS156P-EHL	
Intel Atom® Processor E3900	P8-9
15.6": KS156-AL	
7": KS070-AL	
Intel Atom® Processor E3800	P8-9
15.6": KS156-BT, 15": KS150-BT	
10.1": KS101-BT, VP101-BT(Fanless In-vehicle Panel PC)	
7": KS070-BT	
NXP i.MX8	P10-14
12.1": KIT121-M8M	
10.1": KIT101-M8M	
7": KS070-M8M, VP070-M8M, KIT070-M8M	
NXP i.MX6	P10
10": KS310-IMX6	
7": KS070-FS	
5.7": KS057R-FS	

High-Performance Touch Panel PC



TPC150-SD

7th/6th Gen Intel® Core™ Processor	P16
17": TPC170-SD	
15": TPC150-SD	



Adaptive Display Platform



KSM215-KH

7th Gen Intel® Core™ Processor	P18-19
21.5": KSM215-KH, 19": KSM190-KH	
18.5": KSM185-KH, 17": KSM170-KH	
15.6": KSM156-KH, 15": KSM150-KH	
6th Gen Intel® Core™ Processor	P20-21
21.5": KSM215-SD, 19": KSM190-SD	
18.5": KSM185-SD, 17": KSM170-SD	
15.6": KSM156-SD, 15": KSM150-SD	
Intel Atom® Processor E3900	P22-23
21.5": KSM215-AL, 19": KSM190-AL	
18.5": KSM185-AL, 17": KSM170-AL	
15.6": KSM156-AL, 15": KSM150-AL	
12.1": KSM121-AL, 10.1": KSM101-AL, 7": KSM070-AL	

Industrial/Medical Display & Touch Display

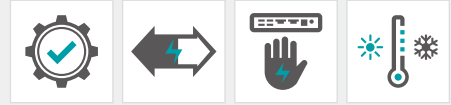


IDP156-MS

Industrial/Medical Touch Monitor	P25-27
27.0": MDPi270	
23.8": MDPi238	
21.5": IDP215P, MDPi215	
15.6": IDP156-MS, MDP156(Medical Display), IDP156P	
12": IDP121P	
10.1": IDP101P	
8": IDP080P	
7": IDP070-MS	

Rugged Design

- Industrial-rated components with high MTBF over 100,000 hrs
- Extended operating temperatures
- High ESD protection for I/O ports
- Signal integrity measurement
- Wide range power design
- 100% Japanese-made solid capacitor
- Power hot plug protection for DC-in type SBC and Industrial Motherboards



Software Integration

- Embedded BIOS and OS customization services
- Windows licensing offerings
- Android, Linux distribution (Yocto/Ubuntu/CentOS/Debian)
- Embedded API
(Hardware Monitor, SMBus, I²C, Brightness Control, GPIO, Watchdog)
- Remote management utility

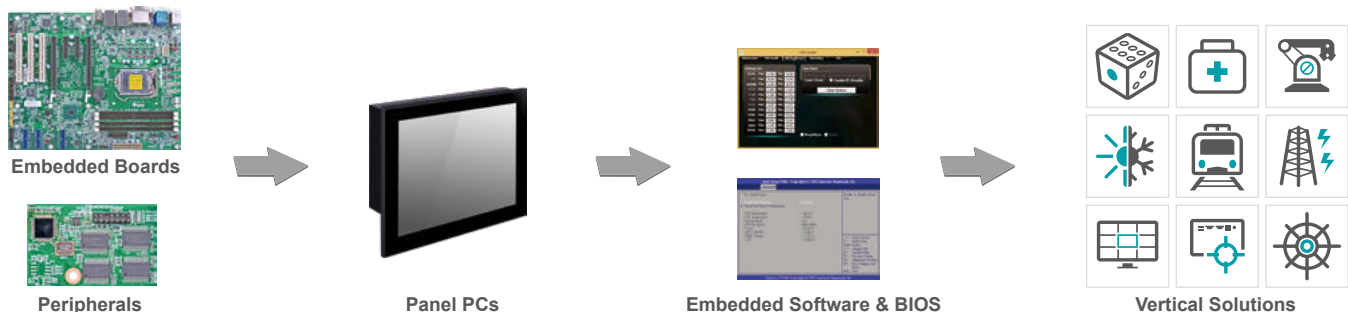


Embedded Total Solution

- Express customization service: 30 days (NRE cost: project based)
- Strict revision control
- Long product life cycle support
- High volume OEM/ODM production capabilities



We Provide a Total Solution Designed for Your Embedded Applications



x86



ARM



x86 & ARM Platform Support

- Supporting ARM platform (NXP series), and x86 platform (Intel® Core™ and Intel Atom®) to fulfill different computing requirements
- Diverse operating system supports: Android, Windows, and Linux



Adaptive Display Platform

- Instantly building a solution by your demand: multiple-choice panel modules from 7" to 21.5", Intel® Core™ and Intel Atom® box modules
- Lower ownership cost and higher upgraded capability with rugged design



Heavy-Duty



Bar Type



Fanless

Complete Panel Computing Solution

- Suited for diverse application scenarios: resistive & capacitive, high ingress protection, wide power input, and temperature resistance
- Product family includes: Fanless Panel PC, Heavy-Duty Panel PC, Bar Panel PC
- Sizes available from 7" to 42"

Fanless Touch Panel PC

Compact Design & Effective Computing



Features

We offer fanless industrial Panel PCs in compact design to satisfy various space-limited applications. Supporting x86 and ARM platform and embedded with rich I/O ports, the series is able to meet your different computing requirements. Certified with IP65 rating and powered by effective computing processors, light industrial Panel PCs are suited for home automation, kiosk, interactive information system, and healthcare computing solution.

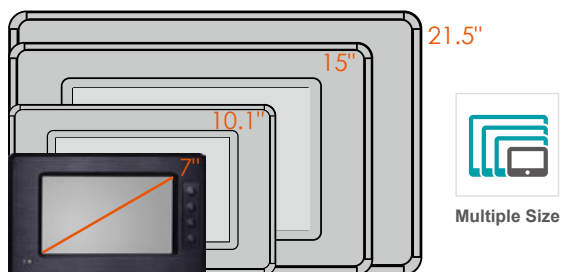
IP65/IP66 Front Water Proof



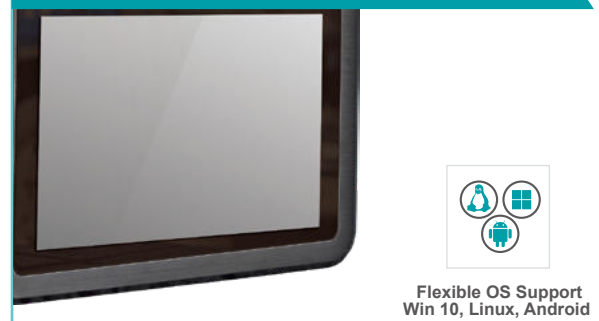
Fanless and Compact Design



Available in Several Sizes



Support Several Platforms and OS





15.6"



21.5"

Model Name		KS156P-EHL	KS215P-EHL
Platform		Intel Atom	
System	Processor	Intel Atom® x6425E / Intel Atom® x6413E	
	Socket	BGA1493	
	Max. Speed	3.0GHz	
	TDP	12W / 9W	
	Cache	1.5M	
	BIOS	AMI 256Mbit	
Memory	Technology	Dual Channel DDR4 3200MHz	
	Max. Capacity	32GB	
	Socket	2 SODIMM	
Display & Touch Screen	Display Type	15.6" PCAP TFT	21.5" PCAP TFT
	Max. Resolution	1366 x 768	1920 x 1080
	Brightness	220 cd/m2	300 cd/m2
Graphics	Connector	DP++ / HDMI	
Storage		1 2.5" SATA 3.0 Drive Bay 1 M.2 2242/2280 B Key (PCIe x1 / SATA /USB2.0)	
Expansion		1 M.2 2242/2280/3052 B Key (PCIe x1/SATA/USB2.0) 1 M.2 2230 E Key (PCIe x1/USB2.0)	
Audio	Audio Codec	Realtek ALC888	
Ethernet	Controller	2 Intel I225LM	
LED	Indicators	Power	
I/O	Ethernet (GbE)	2 GbE	
	Serial	2 RS232/422/485	
	USB	2 USB 3.2 Gen1, 2 USB 3.2 Gen2	
	Display	DP++ , HDMI	
	Audio	1 Line-in	
	Buttons	Power Button	
Power		9~36V DC-in	
OS Support		Windows 10 IoT Enterprise 64bit & Linux	
Mechanism	Construction	Plastic + Aluminum	
	IP Rating	IP65 Front Panel	
	Mounting	VESA / Panel Mount	
	Dimensions	TBD	TBD
	Weight	TBD	TBD
Environment	Operating Temp.	0~50°C	
	Relative Humidity	10 to 95% @ 40°C, non-condensing	



15.6"



15.6"



15"

Model Name		KS156-AL	KS156-BT	KS150-BT
Platform		Atom		
System	Processor	Intel Atom® x5-E3940 Intel® Pentium® Processor N4200	Intel Atom® E3845 Intel Atom® E3825	
	Max. Speed	1.6GHz / 1.1GHz	1.91GHz / 1.33GHz	
	TDP	9.5W/6W	10W/6W	
	Cache	2M	2M/1M	
	BIOS	Insyde SPI 64Mbit	AMI SPI 64Mbit	
Memory	Technology	Dual Channel DDR3L 1867MHz	Single Channel DDR3L 1066MHz (E3825) Dual Channel DDR3L 1333MHz (E3845)	
	Max. Capacity	16GB	4GB/8GB	
	Socket	2 SODIMM	1 SODIMM (E3825) 2 SODIMM (E3845)	
Display & Touch Screen	Display Type	15.6" TFT Capacitive / 5-wire Resistive Touch	15.6" TFT Capacitive / 5-wire Resistive TFT	15" TFT Capacitive / 5-wire Resistive TFT
	Max. Resolution	1366x768	1366x768	1024x768
	Brightness	400 cd/m²	400 cd/m²	250 cd/m²
Graphics	Connector	1 VGA, 1 HDMI	1 DVI-I	
Storage		1x 2.5" SATA 2.0 Drive Bay	1x 2.5" SATA 2.0 Drive Bay 1 mSATA (Shared by Mini PCIe Socket)	
Expansion	Mini PCIe, M.2, PCIe, SIM	1 Full-size Mini PCIe (PCIe/USB), 1 M.2 key (PCIe/SATA/USB)	1 Mini PCIe	
Audio	Audio Codec	Realtek ALC262-VC2-GR	Realtek ALC888	
Ethernet	Controller	2 Intel® I211AT	2 Intel® I210	
LED	Indicators	Power, HDD LED	Power, HDD LED	
I/O	Ethernet (GbE)	2	2	
	Serial	2 RS-232/422/485	3 RS-232/422/485, 1 RS-232	
	USB	4 USB 3.2 Gen1	1 USB 3.2 Gen1, 2 USB 2.0	
	Display	1 VGA, 1 HDMI	1 DVI-I	
	Audio	Line-out	Line-out	
	Buttons	Power Button	Power Switch	
Power		12V DC-in or 15-36V DC-in	12V DC-in	
OS Support		Win10 IoT	Win10 IoT	Win10 IoT
Mechanism	Construction	Aluminum Front Bezel		
	IP Rating	IP65 Front Panel		
	Mounting	Panel/VESA Mount		
	Dimensions	409.6 x 259.9 x 54 mm (W x H x D)	409.6 x 259.9 x 54 mm (W x H x D)	373 x 297 x 46.1 mm (W x H x D)
	Weight	6.09 kg	6 kg	3.8 kg
Environment	Operating Temp.	0°C~50°C (SSD)	-10°C~60°C (SSD)	
	Relative Humidity	5%~85% RH (non-condensing)		



Model Name		KS101-BT	KS070-BT	KS070-AL	VP101-BT
Platform		Atom			Atom
System	Processor	Intel Atom® Processor E3845 / Intel® Celeron® Processor J1900		Intel Atom® x5-E3940 Intel® Celeron Processor N3350	Intel Atom® Processor E3800
	Max. Speed	1.91GHz / 2GHz		1.8GHz / 2.4GHz	BGA 1170
	TDP	10W/10W		9.5W/6W	1.33~1.91GHz
	Cache	2M/2M		2M	10W
	BIOS	AMI SPI 64Mbit		Insyde SPI 128Mbit	2M
Memory	Technology	Single Channel DDR3L 1333MHz		Single Channel DDR3L 1866MHz	Single Channel DDR3L 1333MHz
	Max. Capacity	2GB/4GB		8GB	2GB/4GB
	Socket	Memory Down		1 SODIMM	ECC Memory onboard
Display & Touch Screen	Display Type	10.1" TFT LCD Panel with Capacitive Touch Screen	7" TFT LCD Panel with Capacitive Touch Screen	7" TFT Capacitive / Resistive Touch Screen	10.1" TFT LCD Panel with Capacitive Touch Screen
	Max. Resolution	1280x800	800x480	800x480	1280x800
	Brightness	500 cd/m²		500 cd/m²	500 cd/m²
Graphics	Connector	1 HDMI		1 VGA, 1 DP++	HDMI, VGA
Storage		1x 2.5" SATA 2.0 Drive Bay 1 micro SD (available upon request) 1 mSATA		1 CFast	1x 2.5" SATA 2.0 Drive Bay 1 micro SD (available upon request) Onboard eMMC (available upon request) 2 Mini PCIe, 1 mSATA 1 SIM Socket, 1 8-bit DIO, 5 x Antenna Hole
Expansion		3 Mini PCIe, 1 SIM		1 Mini PCIe, 1 M.2	2 Mini PCIe, 1 mSATA 1 SIM Socket, 1 8-bit DIO, 5 x Antenna Hole
Audio	Audio Codec	Realtek ALC886		Realtek ALC262	Realtek ALC886
Ethernet	Controller	2 Intel® I210		2 Intel® I211	2 Intel® I210
LED	Indicators	Power, HDD LED		-	Power, HDD LED
I/O	Ethernet (GbE)	2	2	2	2
	Serial	4 RS-232/422/485, 1 RS-232	4 RS-232/422/485	2 RS-232/422/485	4 RS-232/422/485, 1 RS-232
	USB	1 USB 3.2 Gen1, 3 USB 2.0		2 USB 3.2 Gen1, 2 USB 2.0	1 USB 3.2 Gen1, 3 USB 2.0
	Display	1 HDMI		1 VGA, 1 DP++	1 HDMI, 1 VGA
	Audio	Line-out, Mic-in		Line-out, Mic-in	Line-out, Mic-in
	Buttons	Power Button, Reset Button		Power Button	Power Button, Reset Button
Power		16~24V DC-in		12V DC-in	9~36V DC-in In-Vehicle Power Management Includes Ignition On/Off and System On/Off Delay Time Control
OS Support		Win7, Win10		Win10	Win7, Win10, Linux
Mechanism	Construction	Aluminum Front Bezel			Aluminum Front Bezel
	IP Rating	IP65 Front Panel			IP65 Front Panel
	Mounting	Panel/VESA Mount			Panel/VESA Mount
	Dimensions	294 x 193 x 48 mm (W x H x D)	208 x 156 x 48 mm (W x H x D)	230 x 150 x 58.3 mm (W x H x D)	294 x 193 x 48 mm (W x H x D)
	Weight	1.7 kg	2 kg	1.5 kg	1.7 kg
Environment	Operating Temp.	0°C~60°C (SSD)	0°C~50°C (SSD)	-20°C~55°C (SSD)	-20°C~60°C
	Relative Humidity	5%~85% RH (non-condensing)			5 to 85% RH (non-condensing)



Model Name		KS310-IMX6	KS070-FS	KS057R-FS	KS070-M8M	VP070-M8M
System	Processor	NXP i.MX6	NXP i.MX6	NXP i.MX6	NXP i.MX 8M Dual	NXP i.MX 8M Dual / Quad Cortex-A53
	Max. Speed	1.0GHz	1.0GHz	1.0GHz	1.3GHz	1.3GHz
	Cache	512KB	512KB	512KB	--	--
Memory	Technology	Dual Channel DDR3 400MHz	Dual Channel DDR3 400MHz	Dual Channel DDR3 400MHz	LPDDR4 up to 3200 MHz	Single Channel LPDDR4 up to 3200 MHz
	Max. Capacity	2GB	2GB	1GB	2GB / 4GB	2GB / 4GB
	Socket	Memory down		Memory Down	Memory Down	Memory Down
Display & Touch Screen	Display Type	10.1" Projected Capacitive TFT	7" Projected Capacitive TFT	5.7" Resistive Touch Screen	7" Projected Capacitive TFT	7" Projected Capacitive TFT
	Max. Resolution	1280x800	1024x600	640x480	1024x600	1024 x 600
	Brightness	300 cd/m²	425 cd/m²	400 cd/m²	425 cd/m²	425 cd/m²
Graphics	Connector	1 HDMI	1 HDMI	1 x HDMI	TBD	HDMI
Storage		1 SD, 4GB eMMC Onboard	1 SD, 4GB eMMC Onboard	1 Micro SD, 8GB eMMC	1 Micro SD, 16GB eMMC	16GB eMMC (Up to 64GB)
Expansion		1 Mini PCIe, 1 mSATA	1 Mini PCIe, 1 mSATA	1 Mini PCIe	1 M.2 B key, 1 M.2 E key, 1 x Nano SIM slot	1 M.2 2242 / 3042 B Key (USB 3.1 Gen1) 1 M.2 2230 E Key (PCIe x1 / USB2.0)
Expansion		1 SIM	1 SIM	-	-	-
		2 Built-in 1W Speaker	2 Built-in 1W Speaker	-	SGTL5000	SGTL5000
		Atheros AR8033	Atheros AR8033	Atheros AR8033 / LAN7500	AR8031	AR8035
LED	Indicators	-	-	-	-	Power
I/O	Ethernet (GbE)	1	1	2	1	1 GbE
	Serial	1 RS-232 / 422 / 485, 1 RS-232		1 RS-485, 1 RS-232	1 RS485, 1 RS232 / 422 / 485	RS-232 / 422 / 485 x1, RS-232 x1, CAN Bus x1
	USB	2 USB 2.0, 1 USB Client	2 USB 2.0, 1 USB Client	2 x USB 2.0 (type A)	2 x USB 3.2 (type A)	2 USB 3.2 Gen1
	Display	1 HDMI	1 HDMI	1 x HDMI	TBD	HDMI
	Audio	1 Line-out/Mic-in	1 Line-out/Mic-in	-	1 x Line out	with Amplifier to support 2W speaker (Optional) 1 x Line out, 1 x MIC in (internal header)
	DIO	8-bit DIO	8-bit DIO	-	8 x DIO	-
	Buttons	Power Switch		1 x Reset Switch	1 x Power Switch	RESET
	Wi-Fi Antenna	-	-	2 x Wi-Fi Module Antenna Hole	4 x Wi-Fi Module Antenna Hole	4 x Wi-Fi Module Antenna Hole
Power		12~36V DC-in	12~36V DC-in	12V DC	12V DC	9~36V DC Power input, with ACC / IGN control
OS Support		Android 4.3	Android 4.3	Yocto 1.8, Android 5.1.1	Android 9.0, Yocto 2.5	Android 9.0 / Yocto 2.5
Mechanism	Construction	Aluminum Front Bezel, Rear Cover: Sheet Metal	Aluminum Front Bezel, Rear Cover: Sheet Metal	Sheet Metal	Aluminum front bezel	Aluminum + SGCC
	IP Rating	IP65 Front Panel		IP20 Front Panel Protection	Front IP65	Front IP65
	Mounting	Wall / Panel	Wall / Panel	Wall, Din-rail(Optional)	Panel / VESA / Din-rail(Optional)	Panel Mount / VESA Mount
	Dimensions	293 x 204 x 43.4 mm (W x H x D)	235 x 150 x 43.8 mm (W x H x D)	170.2mm x 121mm x 57.5mm (W x H x D)	235 x 150 x 43.8 mm (W x H x D)	235 x 150 x 54 mm (W x H x D)
	Weight	1.74 kg	1.26 kg	TBD	TBD	2.9kg
Environment	Operating Temp.	0°C~55°C	0°C~60°C	-20 to 60°C	0~60°C	0~60°C
	Relative Humidity	85% RH at 65°C	85% RH at 65°C	5 to 90% RH (non-condensing)	85% RH at 65°C	85%~65°C (non-condensing)

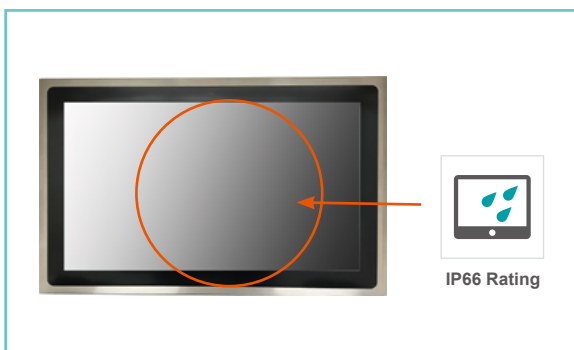


Fanless Touch Panel PC

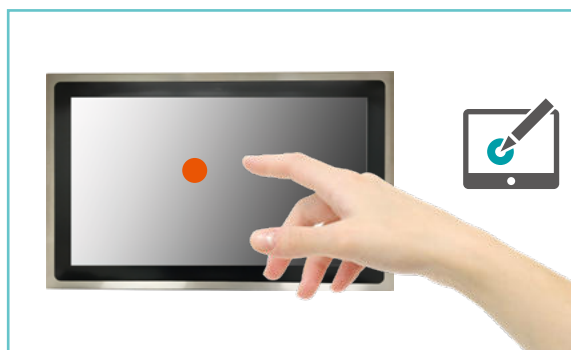
KSX Series

KSX series develops a full IP66 protective panel PC solution. KSX system is preventing the machine from dust accumulation and supports high-pressure water washing down with M12 connectors. It's highly designed for industrial applications including food, chemical and factory automation environments.

Full IP66 Protection



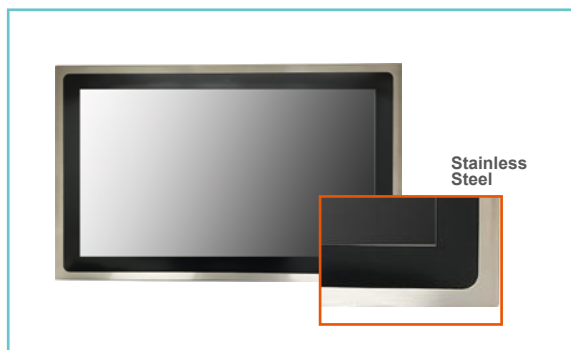
Projected Capacitive Touch



Available in Several Sizes



Construction 304 stainless steel chassis





15.6"



21.5"

Model Name		KSX156P-EHL	KSX215P-EHL
Platform		Intel Celeron	
System	Processor	Intel Celeron J6413	
	Socket	BGA1493	
	Max. Speed	3.0GHz	
	TDP	10W	
	Cache	1.5M	
	BIOS	AMI 256Mbit	
Memory	Technology	Dual Channel DDR4 3200MHz	
	Max. Capacity	32GB, 4GB built-in	
	Socket	2 SODIMM	
Display & Touch Screen	Display Type	15.6" PCAP TFT	21.5" PCAP TFT
	Max. Resolution	1366 x 768	1920 x 1080
	Brightness	220 cd/m2	250 cd/m2
Storage		128GB 3DTLC built-in	
Audio	Audio Codec	Realtek ALC888	
Ethernet	Controller	2 Intel I225LM	
LED	Indicators	Power	
I/O	Ethernet (GbE)	1x M12 8pin for GbE Lan with waterproof cover	
	Serial	1x M12 8pin COM1, RS-232/422/485 default RS-232, with waterproof cover	
	USB	2x M12 8pin for 2* USB 2.0 with waterproof cover	
Power		9~36V DC-in	
OS Support		Windows 10 IoT Enterprise 64bit & Linux	
Mechanism	Construction	304 Stainless steel chassis	
	IP Rating	Full IP65	
	Mounting	VESA Mount	
	Dimensions	TBD	563 x 354 x 70mm (W x H x D)
	Weight	TBD	
Environment	Operating Temp.	0~50°C / -20~70°C by Optional	
	Relative Humidity	10 to 95% @ 40°C, non-condensing	



Fanless Touch Panel PC

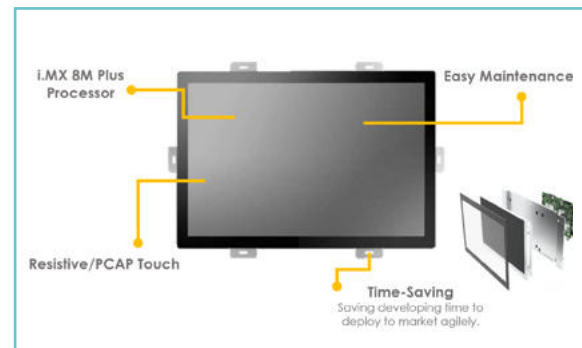
KIT Series

DFI KIT series is powered by NXP i.MX8M and supports multiple communication interfaces e.g USB, Ethernet and HDMI. DFI provides various panel sizes from SVGA to WXGA that you can choose it based on your requirements . KIT series includes extensive I/O ports and has the scalability for Wifi function, highly used for a wide range of applications.

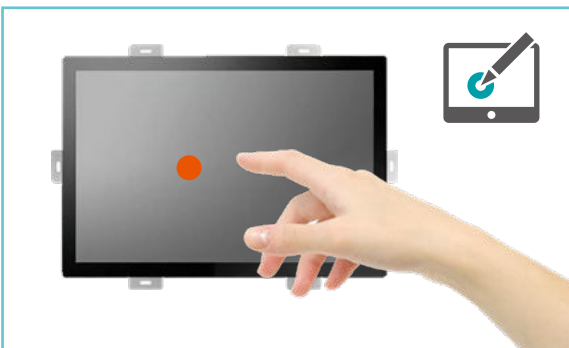
ARM Based solution



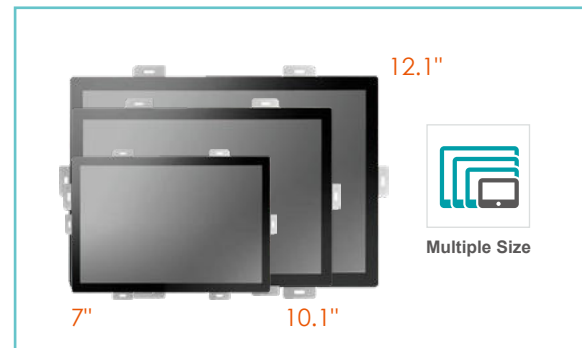
Easy Installation & Maintenance



Projected Capacitive Touch



Available in Several Sizes





7"



10.1"



12.1"

Model Name		KIT070-M8M	KIT101-M8M	KIT121-M8M
Platform		ARM		
System	Processor	NXP i.MX 8M		
	Max. Speed	1.5GHz		
Memory	Technology	Single Channel LPDDR4 3200MHz		
	Max. Capacity	2GB / 4GB		
	Socket	Memory Down		
Display & Touch Screen	Display Type	7" PCAP TFT	10.1" PCAP TFT	12.1" PCAP TFT
	Max. Resolution	800 x 480	1280 x 800	1024 x 768
	Brightness	500 cd/m2	500 cd/m2	500 cd/m2
Graphics	Connector	HDMI		
Storage		16GB eMMC		
Expansion		1 M.2 2242/30422 B Key (USB 3.2 Gen1) / 1 M.2 2230 E Key (PCIe x1/USB2.0)		
Audio	Audio Codec	SGTL5000		
Ethernet	Controller	AR8035		
I/O	Ethernet (GbE)	1 GbE		
	Serial	1 RS485		
	USB	2 USB 3.2 Gen1		
	Display	HDMI		
Power		12 V DC-in		
OS Support		Android 9.0 & Yocto 2.5		
Mechanism	Construction	Aluminum		
	Mounting	Open frames		
	Dimensions	TBD	TBD	TBD
	Weight	TBD	TBD	TBD
Environment	Operating Temp.	0~50°C		
	Relative Humidity	10 to 95% @ 40°C, non-condensing		

Expandable Touch Panel PC

High Performance & Strong Scalability



Features

Powered by Intel® Core™ Desktop Processor, our TPC series is designed for high computing requirements. The various I/O interfaces and expandability makes it easier to increase functional add-ons required in your application scenario. Certified with IP65 and wide voltage support, these heavy industrial Panel PCs are suited for demanding applications in factory automation and other harsh environments.

IP65 Front Water Proof



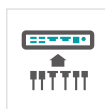
IP65 Rating

Resistive or Projected Capacitive Touch



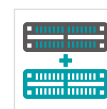
Resistive Touch

Rich I/O : Connectivity



Rich I/O Connectivity

Expandability: 2 PCI/PCIe Slots



Multiple Expansion



17"



15"

Model Name		TPC170-SD	TPC150-SD
Platform		Desktop	Desktop
System	Processor	7th/6th Gen Intel® Core™ Processor	7th/6th Gen Intel® Core™ Processor
	Socket	LGA 1151	LGA 1151
	Max. Speed	2.4~4.2GHz	2.4~4.2GHz
	TDP	35W/47W/65W	35W/47W/65W
	Cache	2M/3M/4M/6M/8M	2M/3M/4M/6M/8M
	Chipset	Intel® Q170	Intel® H110/Intel® Q170
	BIOS	Insyde SPI 128Mbit	Insyde SPI 128Mbit
Memory	Technology	Dual Channel DDR4 1866/2133MHz	Dual Channel DDR4 1866/2133MHz
	Max. Capacity	32GB	32GB
	Socket	2 SODIMM	2 SODIMM
Display & Touch Screen	Display Type	17" PCAP/Resistive TFT	15" PCAP/Resistive TFT
	Max. Resolution	1280x1024	1024x768
	Brightness	350 cd/m ²	300 cd/m ²
Graphics	Connector	1 VGA, 1 DVI-I, 1 DP++	1 VGA, 1 DVI-I, 1 DP++
Storage		1 or 2x 2.5" SATA 3.0 Drive Bay	1 or 2x 2.5" SATA 3.0 Drive Bay
Expansion	PCIe, PCI	2 PCI or 2 PCIe x8	2 PCI or 2 PCIe x8
	Mini PCIe	1 Mini PCIe	1 Mini PCIe
Audio	Audio Codec	ALC888	ALC888
Ethernet	Controller	1 Intel® I210, 1 Intel® I219	1 Intel® I210, 1 Intel® I219
LED	Indicators	Power, HDD, Alarm LED	Power, HDD, Alarm LED
I/O	Ethernet (GbE)	2	2
	Serial	1 RS-232/422/485, 1 RS-232	1 RS-232/422/485, 1 RS-232
	USB	4 USB 3.2 Gen1, 3 USB 2.0	4 USB 3.2 Gen1, 3 USB 2.0
	Display	1 VGA, 1 DVI-I, 1 DP++	1 VGA, 1 DVI-I, 1 DP++
	Audio	2 Speaker	2 Speaker
	PS/2	1	1
	Buttons	Power Switch, Remote Power Switch	Power Switch, Remote Power Switch
Power		ATX Power / 24V DC-in	ATX Power / 24V DC-in
OS Support		Win7, Win8.1, Win10, Linux	Win7, Win8.1, Win10, Linux
Mechanism	Construction	Sheet Metal	Sheet Metal
	IP Rating	IP65 Front Panel	IP65 Front Panel
	Mounting	VESA / Panel Mount	VESA / Panel Mount
	Dimensions	404 x 363 x 98.9 mm (W x H x D)	403 x 330 x 103.5 mm (W x H x D)
	Weight	13kg	10.87kg
Environment	Operating Temp.	0°C~50°C	0°C~50°C
	Relative Humidity	5%~85% RH	5%~85% RH

Modularized Touch Panel PC

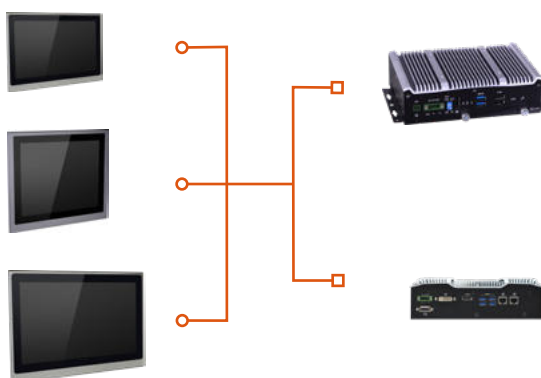
Modular Design & Easy Maintenance



Features

Adaptive Display Platform (ADP) is an advanced configure solution for Panel PC. It is a flexible modular system that provides customers with easy maintenance, installation, and configuration. The concept of this platform is modular design, which means letting users combine their ideal displays and box PCs themselves. The components are interconnected, but user can separate and detach the components for repair and development. It will be much cheaper to upgrade certain modules instead of the whole unit.

Configure by Demand



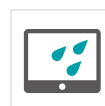
Rugged Design



Wide-voltage



Wide-temp



IP65 Rating



Anti-shock/vibration



Fanless

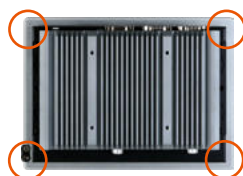


Cableless

Easy Installation & Maintenance



• Step 1



• Step 2

Upgrade Capability

- Brightness
- Resolution
- Panel Size
- Performance
- Function
- Connectivity





Model Name		KSM215-KH	KSM190-KH	KSM185-KH
Platform		Mobile		
System	Processor	7th Gen Intel® Core™ Processor		
	Max. Speed	2.1~4.2GHz		
	TDP	25W/35W/45W		
	Cache	3M/6M/8M		
	Chipset	Intel® CM238/QM175		
	BIOS	Insyde SPI 32Mbit		
Memory	Technology	Dual Channel DDR4 2400MHz		
	Max. Capacity	32GB		
	Socket	2 SODIMM		
Display & Touch Screen	Display Type	21.5" PCAP/Resistive TFT	19" PCAP/Resistive TFT	18.5" PCAP/Resistive TFT
	Max. Resolution	1920x1080	1280x1024	1366x768
	Brightness	300 cd/m²	350 cd/m²	450 cd/m²
Graphics	Connector	1 VGA, 1 DVI-I, 1 HDMI		
Storage		1x 2.5" SATA 2.0 Drive Bay	1x 2.5" SATA 2.0 Drive Bay	1x 2.5" SATA 2.0 Drive Bay
Expansion	Mini PCIe	2 Mini PCIe, 1 M.2		
	CFast	N/A		
Audio	Audio Codec	Realtek ALC886		
Ethernet	Controller	1 Intel® I211, 1 Intel® I219		
LED	Indicators	Power, HDD, Alarm		
I/O	Ethernet (GbE)	2		
	Serial	4 RS-232/422/485		
	USB	4 USB 3.2 Gen1, 2 USB 2.0		
	Display	1 VGA, 1 DVI-I, 1 HDMI		
	Audio	Line-out		
	Buttons	Power, Reset		
	Wi-Fi Antenna	2		
Power		9~36V DC-in		
OS Support		Win10, Linux		
Mechanism	Construction	Aluminum + SGCC		
	IP Rating	IP65 Front Panel		
	Mounting	VESA / Wall / Panel Mount		
	Dimensions	544.2 x 360.6 x 118 mm (W x H x D)	467 x 400 x 118 mm (W x H x D)	472.06 x 314.15 x 102.8 mm (W x H x D)
	Weight	9.4 kg	10 kg	8.1 kg
Environment	Operating Temp.	0°C~45°C	-30°C~50°C	0°C~50°C
	Relative Humidity	90% RH at 50°C		



17"



15.6"



15"

Model Name		KSM170-KH	KSM156-KH	KSM150-KH
Platform		Mobile		
System	Processor	7th Gen Intel® Core™ Processor		
	Max. Speed	2.1~4.2GHz		
	TDP	25W/35W/45W		
	Cache	3M/6M/8M		
	Chipset	Intel® CM238/QM175		
	BIOS	Insyde SPI 32Mbit		
Memory	Technology	Dual Channel DDR4 2400MHz		
	Max. Capacity	32GB		
	Socket	2 SODIMM		
Display & Touch Screen	Display Type	17" PCAP/Resistive TFT	15.6" PCAP/Resistive TFT	15" PCAP/Resistive TFT
	Max. Resolution	1280x1024	1366x768	1024x768
	Brightness	350 cd/m ²	400 cd/m ²	300 cd/m ²
Graphics	Connector	1 VGA, 1 DVI-I, 1 HDMI		
Storage		1x 2.5" SATA 2.0 Drive Bay	1x 2.5" SATA 2.0 Drive Bay	1x 2.5" SATA 2.0 Drive Bay
Expansion	Mini PCIe	2 Mini PCIe, 1 M.2		
	CFast	N/A		
Audio	Audio Codec	Realtek ALC886		
Ethernet	Controller	1 Intel® I211, 1 Intel® I219		
LED	Indicators	Power, HDD, Alarm		
I/O	Ethernet (GbE)	2		
	Serial	4 RS-232/422/485		
	USB	4 USB 3.2 Gen1, 2 USB 2.0		
	Display	1 VGA, 1 DVI-I, 1 HDMI		
	Audio	Line-out		
	Buttons	Power, Reset		
	Wi-Fi Antenna	2		
Power		9~36V DC-in		
OS Support		Win10, Linux		
Mechanism	Construction	Aluminum + SGCC		
	IP Rating	IP65 Front Panel		
	Mounting	VESA / Wall / Panel Mount		
	Dimensions	404 x 363.8 x 102.8 mm (W x H x D)	407.3 x 277.3 x 97.92 mm (W x H x D)	387 x 320 x 118 mm (W x H x D)
	Weight	8.1 kg	8 kg	7.7 kg
Environment	Operating Temp.	0°C~45°C	0°C~50°C	0°C~50°C
	Relative Humidity	5%~95% RH (non-condensing)		



Model Name		KSM215-SD	KSM190-SD	KSM185-SD
Platform		Desktop		
System	Processor	6th Gen Intel® Core™ Processor		
	Socket	LGA 1151		
	Max. Speed	2.4~3.4GHz		
	TDP	35W		
	Cache	4M/6M/8M		
	Chipset	Intel® Q170		
	BIOS	Insyde SPI 128Mbit		
Memory	Technology	Dual Channel DDR4 1866/2133MHz		
	Max. Capacity	32GB		
	Socket	2 SODIMM		
Display & Touch Screen	Display Type	21.5" PCAP/Resistive TFT	19" PCAP/Resistive TFT	18.5" PCAP/Resistive TFT
	Max. Resolution	1920x1080	1280x1024	1366x768
	Brightness	300 cd/m ²	350 cd/m ²	450 cd/m ²
Graphics	Connector	1 VGA, 1 DVI, 1 HDMI		
Storage		1 x 2.5" SATA 3.0 Drive Bay		
Expansion	Mini PCIe	2 Mini PCIe		
	CFast	N/A		
Audio	Audio Codec	Realtek ALC888		
Ethernet	Controller	1 Intel® I211, 1 Intel® I219		
LED	Indicators	Power, HDD, Alarm		
I/O	Ethernet (GbE)	2		
	Serial	4 RS-232/422/485		
	USB	4 USB 3.2 Gen1		
	Display	1 DVI-I, 1 HDMI		
	Audio	Mic-in, Line-out		
	Buttons	Power, Reset		
	Wi-Fi Antenna	1		
Power		9~36V DC-in		
OS Support		Win7, Win10, Linux		
Mechanism	Construction	Aluminum + SGCC		
	IP Rating	IP65 Front Panel		
	Mounting	VESA / Panel Mount		
	Dimensions	544.2 x 360.6 x 118 mm (W x H x D)	467 x 400 x 118 mm (W x H x D)	472.06 x 314.15 x 102.8 mm (W x H x D)
	Weight	9.4 kg	10 kg	8.1 kg
Environment	Operating Temp.	0°C~45°C	-30°C~50°C	0°C~50°C
	Relative Humidity	90% RH at 50°C		



Model Name		KSM170-SD	KSM156-SD	KSM150-SD
Platform		Desktop		
System	Processor	6th Gen Intel® Core™ Processor		
	Socket	LGA 1151		
	Max. Speed	2.4~3.4GHz		
	TDP	35W		
	Cache	4M/6M/8M		
	Chipset	Intel® Q170		
	BIOS	Insyde SPI 128Mbit		
Memory	Technology	Dual Channel DDR4 1866/2133MHz		
	Max. Capacity	32GB		
	Socket	2 SODIMM		
Display & Touch Screen	Display Type	17" PCAP/Resistive TFT	15.6" PCAP/Resistive TFT	15" PCAP/Resistive TFT
	Max. Resolution	1280x1024	1366x768	1024x768
	Brightness	350 cd/m ²	400 cd/m ²	300 cd/m ²
Graphics	Connector	1 VGA, 1 DVI, 1 HDMI		
Storage		1 x 2.5" SATA 3.0 Drive Bay		
Expansion	Mini PCIe	2 Mini PCIe		
	CFast	N/A		
Audio	Audio Codec	Realtek ALC888		
Ethernet	Controller	1 Intel® I211, 1 Intel® I219		
LED	Indicators	Power, HDD, Alarm		
I/O	Ethernet (GbE)	2		
	Serial	4 RS-232/422/485		
	USB	4 USB 3.2 Gen1		
	Display	1 DVI-I, 1 HDMI		
	Audio	Mic-in, Line-out		
	Buttons	Power, Reset		
	Wi-Fi Antenna	1		
Power		9~36V DC-in		
OS Support		Win7, Win10, Linux		
Mechanism	Construction	Aluminum + SGCC		
	IP Rating	IP65 Front Panel		
	Mounting	VESA / Panel Mount		
	Dimensions	404 x 363.8 x 102.8 mm (W x H x D)	407.3 x 277.3 x 98 mm (W x H x D)	387 x 320 x 118 mm (W x H x D)
	Weight	8.1 kg	8 kg	7.7 kg
Environment	Operating Temp.	0°C~45°C	0°C~50°C	0°C~50°C
	Relative Humidity	5%~95% RH (non-condensing)		



Model Name		KSM215-AL	KSM190-AL	KSM185-AL	KSM170-AL
Platform		Atom			
System	Processor	Intel Atom® E3900			
	Max. Speed	1.8~2.4GHz			
	TDP	6W/9.5W			
	Cache	2M			
	BIOS	Insyde SPI 128Mbit			
Memory	Technology	Single Channel DDR3L 1866MHz			
	Max. Capacity	8GB			
	Socket	1 SODIMM			
Display & Touch Screen	Display Type	21.5"/19"/18.5"/17" PCAP/Resistive TFT			
	Max. Resolution	1920x1080	1280x1024	1366x768	1280x1024
	Brightness	300 cd/m ²	350 cd/m ²	450 cd/m ²	350 cd/m ²
Graphics	Connector	1 x DP++, 1 x VGA or DVI-D (Opt.)			
Storage		1 2.5" SATA 3.0 Drive Bay (accessible) 1 mSATA (share by Mini PCIe)			
Expansion	Mini PCIe	2 Mini PCIe			
	SIM	1 SIM Slot			
Audio	Audio Codec	Realtek ALC262			
Ethernet	Controller	2 Intel® I210AT			
LED	Indicators	Power, HDD, Alarm LED			
I/O	Ethernet (GbE)	2 GbE Support Jumbo Frame, IEEE1588v2, WOL, PXE 802.3 af PoE (PSE), Individual Port 15.4W (Opt.)			
	Serial	2 RS-232/422/485 Support 5V/12V Power			
	USB	2 USB 3.2 Gen1, 2 USB 2.0			
	Display	1 DP++, 1 VGA or DVI-D (Opt.)			
	Audio	1 Line-out, 1 Mic-in			
	DIO	4 x DI/4 x DO (10-pin terminal block) (Opt.)			
	Buttons	Power Button, Reset Switch			
	Wi-Fi Antenna	4 x Wi-Fi Module Antenna Hole			
Power		24V/9~48V DC-in (Ignition On/Off and System On/Off Delay Time Control)			
OS Support		Win10, Ubuntu			
Mechanism	Construction	Aluminum Front Bezel			
	IP Rating	IP65 Front Panel			
	Mounting	VESA / Panel Mount			
	Dimensions	544.2 x 360.6 x 80.9 mm (W x H x D)	467 x 400 x 80.5 mm (W x H x D)	472.1 x 314.1 x 80.9 mm (W x H x D)	404 x 363.8 x 80.9 mm (W x H x D)
	Weight	7 kg	7.6 kg	5.7 kg	5.4 kg
Environment	Operating Temp.	0 to 60°C	-20 to 70°C	0 to 60°C	0 to 50°C
	Relative Humidity	5%~90% RH			5%~95% RH (non-condensing)



Model Name		KSM156-AL	KSM150-AL	KSM121-AL	KSM101-AL	KSM070-AL
Platform		Atom				
System	Processor	Intel Atom® E3900				
	Socket	BGA 1296				
	Max. Speed	1.8~2.4GHz				
	TDP	6W/9.5W				
	Cache	2M				
	BIOS	Insyde SPI 128Mbit				
Memory	Technology	Single Channel DDR3L 1866MHz				
	Max. Capacity	8GB				
	Socket	1 SODIMM				
Display & Touch Screen	Display Type	15.6"/15"/12.1"/10.1"/7" PCAP/Resistive TFT				
	Max. Resolution	1366x768	1024x768	1024x768	1280x800	800x480
	Brightness	400 cd/m ²	300 cd/m ²	500 cd/m ²	500 cd/m ²	500 cd/m ²
Graphics	Connector	1 x DP++, 1 x VGA or DVI-D (Opt.)				
Storage		1 2.5" SATA 3.0 Drive Bay (accessible) 1 mSATA (share by Mini PCIe)				
Expansion	Mini PCIe	2 Mini PCIe				
	SIM	1 SIM Slot				
Audio	Audio Codec	Realtek ALC262				
Ethernet	Controller	2 Intel® I210AT				
LED	Indicators	Power, HDD, Alarm LED				
I/O	Ethernet (GbE)	2 GbE Support Jumbo Frame, IEEE1588v2, WOL, PXE 802.3 af PoE (PSE), Individual Port 15.4W (Opt.)				
	Serial	2 RS-232/422/485 Support 5V/12V Power				
	USB	2 USB 3.2 Gen1, 2 USB 2.0				
	Display	1 DP++, 1 VGA or DVI-D (Opt.)				
	Audio	1 Line-out, 1 Mic-in				
	DIO	4 x DI/4 x DO (10-pin terminal block) (Opt.)				
	Buttons	Power Button, Reset Switch				
	Wi-Fi Antenna	4 x Wi-Fi Module Antenna Hole				
Power		24V/9~48V DC-in (Ignition On/Off and System On/Off Delay Time Control)				
OS Support		Win10, Ubuntu				
Mechanism	Construction	Aluminum Front Bezel				
	IP Rating	IP65 Front Panel				
	Mounting	VESA / Panel Mount				
	Dimensions	407.3 x 277.3 x 76.1 mm (W x H x D)	387 x 320 x 80.5 mm (W x H x D)	308 x 265.3 x 77.9 mm (W x H x D)	275 x 212.3 x 72.9 mm (W x H x D)	224 x 163.55 x 72.9 mm (W x H x D)
	Weight	TBD	5.3 kg	TBD	TBD	2.2 kg
Environment	Operating Temp.	0 to 60°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C
	Relative Humidity	5%~95% RH (non-condensing)				

Industrial/Medical Display & Touch Display

Multiple Sizes & High Brightness



Industrial Display & Touch Display

IDP Series

DFI provides an array of industrial-grade monitor series supporting multi-touch, HDBaseT, and Wifi display functions, which are suitable for harsh environments in various applications. The sizes are available covering from 7" to 21.5".

IP65 Front Water Proof



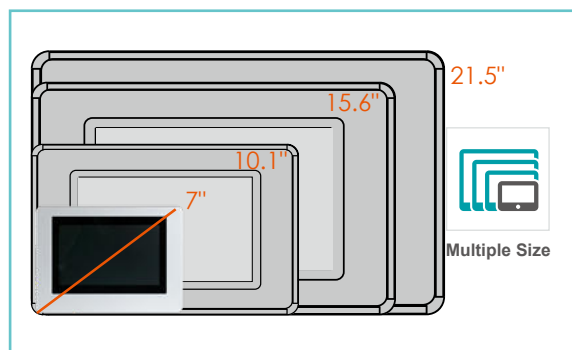
Projected Capacitive Touch



Modular Extend Display Module Support



Available in Several Sizes





15.6"



7"

Model Name	IDP156-MS	IDP070-MS
Display Type	15.6" PCAP/Resistive TFT	7" PCAP/Resistive TFT
Max. Resolution	1366x768	800x480
Brightness	400 cd/m ²	500 cd/m ²
Contrast Ratio	800:1	400:1
View Angle	170/130	130/140
Input Interface	VGA, DVI, HDMI, USB, COM	VGA, DVI, HDMI, USB, COM
Backlight Life	50,000 Hrs	40,000 Hrs
Power	20V USB Type C VDC input / 12 to 24 VDC input with DC Jack	20V USB Type C VDC input / 12 to 24 VDC input with DC Jack
Operating Temp.	-20°C to 70°C/ -40°C to 70°C (available upon request)	
Dimensions	407.3 x 277.3 x 56.5 mm	224 x 163.55 x 43.6 mm
External Display	1x HDBaseT 100M / 2 x HDBaseT 100M / Wifi Display	1x HDBaseT 100M / 2 x HDBaseT 100M / Wifi Display



8"



10"



12"



15.6"



21.5"

Model Name	IDP080P	IDP101P	IDP121P	IDP156P	IDP215P
Display Type	8" PCAP TFT	10.1" PCAP TFT	12.1" PCAP TFT	15.6" PCAP TFT	21.5" PCAP TFT
Max. Resolution	800 x 600	1280 x 800	800 x 600	1366 x 768	1920 x 1080
Brightness	250 cd/m ²	400 cd/m ²	500 cd/m ²	400 cd/m ²	250 cd/m ²
Contrast Ratio	500:1	800:1	700:1	800:1	1000:1
View Angle	140 (H) / 120 (V)	178 (H) / 178 (V)	160 (H) / 140 (V)	170 (H) / 130 (V)	170 (H) / 130 (V)
Input Interface	VGA, USB	VGA, HDMI1.2, USB	VGA, HDMI1.2, USB, Line-in		VGA, HDMI, DP, USB, Line-in
Backlight Life	20,000 hrs	20,000 hrs	50,000 hrs	50,000 hrs	50,000 hrs
Power	AC Input, External power adapter, 100~240V				
Operating Temp.	0°C to 40°C				0°C to 50°C
Dimensions	200.5(W) x 161.3(H) x 29.6(D) mm	260.5(W) x 179.1(H) x 27.7(D) mm	299.4(W) x 235.9(H) x 37.2(D) mm	391(W) x 246(H) x 40(D) mm	524(W) x 317(H) x 46(D) mm

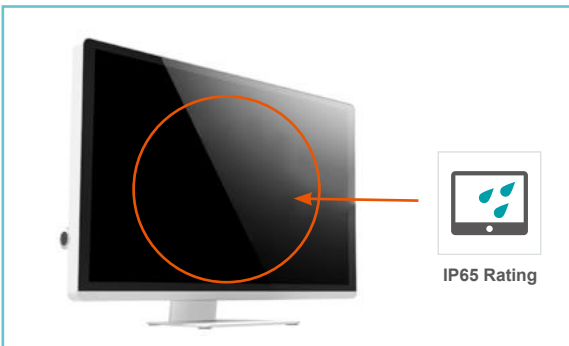


Medical Display & Touch Display

Medical Display

DFI MDP series is a slim and stylish medical grade touch display, featuring P-CAP, various I/O, Full HD resolution, IEC / EN 60601-1 standard, and DICOM Part 14 compliance. It provides excellent medical image quality, color reproduction and image contrast to meet a variety of medical imaging segments such as clinical review or clinical consultant.

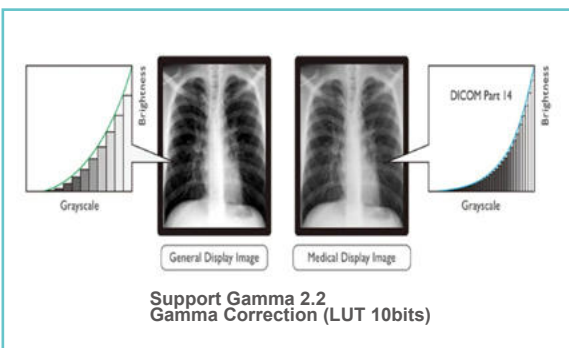
IP65 Front Water Proof



Certification and Regulatory

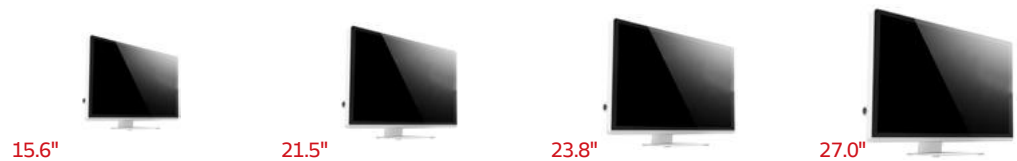


DICOM Grayscale and Gamma Correction



Built-in Medical Level Power (Option)





Model Name		MDP156	MDPi215	MDPi238	MDPi270
Display	Display	15.6" TFT LCD	21.5" TFT LCD	23.8" TFT LCD	27" TFT LCD
	Max. Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080 (4K Option)
	Luminance	250 nits	350 nits	250 nits	300 nits
	Contrast	700:1	1000:1	1000:1	3000:1
	View Angle	170(H) / 170(V)	178(H) / 178(V)	178(H) / 178(V)	160(H) / 140(V)
	Color Depth	6 bits	8 bits	6 bits + FRC	8 bits
	Display Colors	262K	16.7M	16.7M	16.7M
	Response Time (ms)	30	22 (On/Off)	14 (GtG)	12 (On/Off)
Touch Screen	Backlight MTBF	50,000 hrs (Min.)	50,000 hrs (Min.)	30,000 hrs (Min.)	30,000 hrs (Min.)
	Type	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
	Touch Point	10	10	10	10
	Glass Coating	N/A	AG	AG	AG
Systems	Interface	USB	Combo(USB/RS232)	Combo(USB/RS232)	Combo(USB/RS232)
	Color Temperature	9300/7500/6500/5800/sRGB/User	Neutral/Warm/Cool/User	Neutral/Warm/Cool/User	Neutral/Warm/Cool/User
	Gamma Selection	OFF/1.8/2.0/2.2/2.4	Neutral/2.2/DICOM	Neutral/2.2/DICOM	Neutral/2.2/DICOM
	Gamma LUT (bits)	N/A	10	10	10
I/O Interface	OSD Languages	English/Japanese	English/French/German/Italian/Spanish/Japanese	English/French/German/Italian/Spanish/Japanese	English/French/German/Italian/Spanish/Japanese
	Speaker	2 x 0.7W	2 x 2W Speaker	2 x 2W Speaker	2 x 2W Speaker
	VGA	1 x VGA	1 x VGA	1 x VGA	1 x VGA
	DP	N/A	1 x DP1.2	1 x DP1.2	1 x DP1.2
	HDMI	1 x HDMI	1 x HDMI 1.4 or DVI-D	1 x HDMI 1.4 or DVI-D	1 x HDMI 1.4 or DVI-D
	Audio	1 x Line-in	1 x Line-in	1 x Line-in	1 x Line-in
Power requirements	Power input	1 x DC IN	1 x DC IN	1 x DC IN	1 x DC IN
	AC Input	External power adapter,100 ~ 240V	External power adapter,100 ~ 250V	External power adapter,100 ~ 250V	External power adapter,100 ~ 250V
	Power Consumption	9W (Typ.)	40W (Max)	40W (Max)	40W (Max)
Mechanical	Chassis Material	Plastic	Plastic ABS	Plastic ABS	Plastic ABS
	Color	White	White	White	White
	Dimension (W)(H)(D)	387.8 (W) x 232.9 (H) x 38.45 (D) mm	537 (W) x 387 (H) x 175 (D) mm (with Stand) 537 (W) x 339 (H) x 69 (D) mm (w/o Stand)	581 (W) x 400 (H) x 175 (D) mm (with Stand) 581 (W) x 360 (H) x 69 (D) mm (w/o Stand)	651 (W) x 441 (H) x 175 (D) mm (with Stand) 651 (W) x 402 (H) x 69 (D) mm (w/o Stand)
	Weight	3.5 (w/o Stand)	8.2 (with Stand) 6.5 (w/o Stand)	9.5 (with Stand) 7.7 (w/o Stand)	10.3 (with Stand) 8.4 (w/o Stand)
	Mounting	75 x 75 mm VESA mount	100 x 100 mm VESA mount	100 x 100 mm VESA mount	100 x 100 mm VESA mount
	Operating Temperature	0°C ~ 40°C	0°C ~ 40°C	0°C ~ 40°C	0°C ~ 40°C
	Storage Temperature	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C
	Operating Humidity	5% to 95% non-condensing	30% to 75% non-condensing	30% to 75% non-condensing	30% to 75% non-condensing
	Others				
Others	OSD	7 keys (Menu,Input,Power...)	RotaryKnob buttons on the side edge Power On/Off, Menu	RotaryKnob buttons on the side edge Power On/Off, Menu	RotaryKnob buttons on the side edge Power On/Off, Menu
Certification	Certification	CE, FCC and UL60601 in progress	cTUVus(60601 Ed3.1), CE(EN 60601-1, EN60601-1-2),FCC-class B	cTUVus(60601 Ed3.1), CE(EN 60601-1, EN60601-1-2),FCC-class B	cTUVus(60601 Ed3.1), CE(EN 60601-1, EN60601-1-2),FCC-class B
Protection	IP level	"HDMI Cable USB Cable for Touch Power Adapter Power Cord"	Audio Cable DP Cable HDMI Cable VGA Cable USB 2.0 Cable Power Adapter	Audio Cable DP Cable HDMI Cable VGA Cable USB 2.0 Cable Power Adapter	Audio Cable DP Cable HDMI Cable VGA Cable USB 2.0 Cable Power Adapter