



iPPC-x701-WES7/iPPC-x801-WES7

10.4"/12.1"/15"/17" Panel PC with
Atom E3827/E3845 CPU and WES7

Features

- 10.4", 12.1", 15" and 17" TFT LCD with Touch Panel
- Windows Embedded Standard 7 SP1
- Intel® Atom™ E3827 1.75 GHz/E3845 1.91 GHz
- Rich software support
- Various Memory and Storage
 - ▶ 2 GB DDR3 SDRAM
 - ▶ 16 KB EEPROM and 128 KB MRAM for data retention
 - ▶ 1 x microSD socket with one microSD card
- Various Communication Interfaces
 - ▶ 1 x RJ-45, 10/100/1000BASE-T Ethernet Port
 - ▶ 2 x Serial Ports (RS-232/RS-422/RS-485)
 - ▶ 2 x USB 2.0 (host)
- 64-bit Hardware Serial Number for Software Protection
- Redundant Power Inputs



Introduction

The iPPC series is WES7 based Panel PC that combine computing, I/O, and operator interface into a single unit, and provide the perfect solution for integrating HMI, data acquisition and control in an individual iPPC.

It is equipped with an Intel Atom E3827 or E3845 CPU, TFT LCD and a variety of connectives including dual Gigabit Ethernet, USB port, RS-232 and RS-485 interface. The operating system is pre-installed in the built-in mSATA SSD, and the storage can be expanded from a Compact Flash slot. Remote I/O expansion is available to use our Ethernet I/O modules and RS-485 I/O modules. Designed for panel mount installation, the front panel is NEMA 4/IP65 rated and can withstand sprayed water, humidity and extreme dust.

Designed to operate over a wide -20°C ~ 60°C ambient temperature range, the fanless design offers the ultimate in reliability with no moving parts.

Since WES7 has the same Win32 API as Windows 7, most popular applications on desktop can run on WES7 based Panel PC.

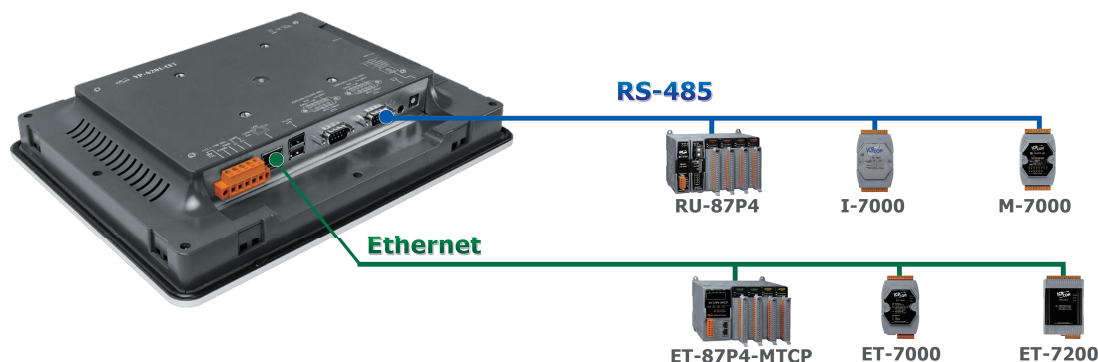
Windows Embedded Standard 7.0



WES7 has the same Win32 API as Windows 7. Most popular applications on desktop can be run on WES7. It's also compatible with rich Windows IDEs, such as Visual studio, Delphi, Borland C++ Builder, etc.

- Full Win32 API
- Remote Desktop Protocol 5.1
- Silverlight 5
- Enhanced Write Filter
- .NET Framework 3.5 SP1, 4.0, 4.5

Applications



■ Specifications

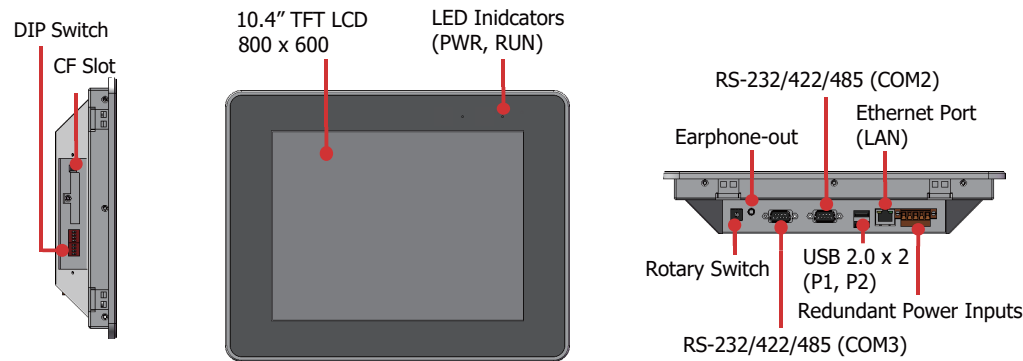
Models	iPPC-4701-WES7	iPPC-5701-WES7	iPPC-6701-WES7	iPPC-7701-WES7
Software				
OS	Windows Embedded Standard 7 SP1			
Service	IE11, FTP Server, IIS 7.0, ASP (Java Script, VB Script)			
Framework Support	.Net Framework 3.5, 4.0, 4.5			
Multilanguage Support	English, German, French, Spanish, Portuguese, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese			
SDK	DII for VC, DII for Visual Studio.Net			
Main Unit				
CPU	E3827, 1.75 GHz, 64-bit dual core			
64-bit Hardware Serial Number	Yes			
System Memory	2 GB DDR3 SDRAM			
Storage	32 GB SSD, 16 GB CF card			
Non-Volatile Memory	128 KB MRAM, 16 KB EEPROM			
Real Time Clock	Provide seconds, minutes, hours, dates, day of week, month, year			
Watchdog Timer	Dual Watchdog Timer			
Display				
Size	10.4" (4:3)	12.1" (4:3)	15" (4:3)	17" (4:3)
Resolution	800 x 600		1024 x 768	1280 x 1024
Brightness	400 cd/m2			350 cd/m2
Contrast Ratio	500:1	700:1		
Backlight Life	50,000 hours			
Touch Panel	5-wire, resistive type; light transmission: 80 %			
LED Indicators				
Status	1 x System, 1 x Power	1 x System, 1 x Power, 2 x Programmable		
COM Ports				
Ports	2 x RS-232/RS-422/RS-485			
HMI				
Buzzer	Yes			
Rotary Switch	1 x 10 Position (0 ~ 9)			
Audio				
Cable	Earphone-out	Microphone-in and Earphone-out		
Ethernet				
Ports	1 x RJ-45 10/100/1000 Base-TX		2 x RJ-45 10/100/1000 Base-TX	
USB				
USB 2.0	2			4
Power				
Input Range	+10 ~ 30 VDC (1500 VDC Isolated)			
Redundant Power Inputs	Yes			
Consumption	22.0 W	27.0 W	29.0 W	36.0 W
Mechanical				
Casing	Metal			
Dimensions (W x L x H)	291 x 229 x 53 mm	323 x 254 x 63 mm	381 x 305 x 63 mm	413 x 359 x 69 mm
Panel Cut-Out (W x H)	274 x 211, ±1 mm	308 x 239, ±1 mm	364 x 288, ±1 mm	394 x 340, ±1 mm
Installation	Panel Mounting, VESA Mounting (75 x 75, 100 x 100)			
Ingress Protection Rating	Front panel: NEMA 4/IP65			
Environmental				
Operating Temperature	-20 °C ~ +60 °C			
Storage Temperature	-20 °C ~ +70 °C			
Humidity	10 ~ 90 % RH, Non-condensing			

Specifications

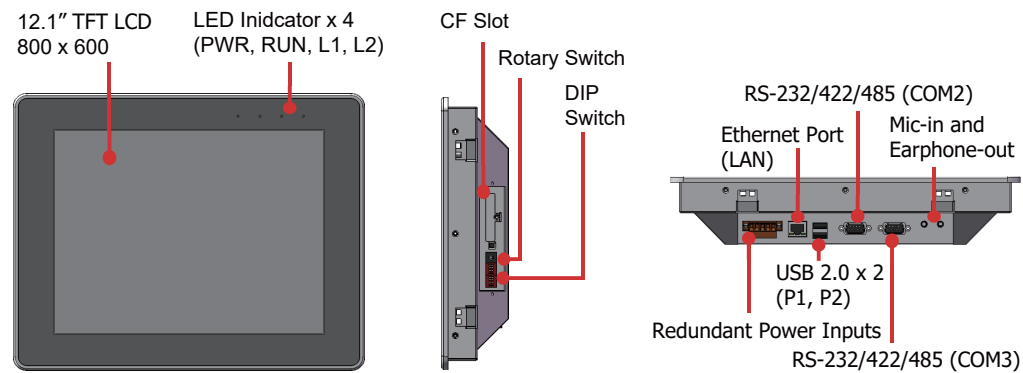
Models	iPPC-4801-WES7	iPPC-5801-WES7	iPPC-6801-WES7	iPPC-7801-WES7
Software				
OS	Windows Embedded Standard 7 SP1			
Service	IE11, FTP Server, IIS 7.0, ASP (Java Script, VB Script)			
Framework Support	.Net Framework 3.5, 4.0, 4.5			
Multilanguage Support	English, German, French, Spanish, Portuguese, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese			
SDK	DLL for VC, DLL for Visual Studio.Net			
Main Unit				
CPU	E3845, 1.91 GHz, 64-bit quad core			
64-bit Hardware Serial Number	Yes			
System Memory	4 GB DDR3 SDRAM			
Storage	32 GB SSD, 16 GB CF card			
Non-Volatile Memory	128 KB MRAM, 16 KB EEPROM			
Real Time Clock	Provide seconds, minutes, hours, dates, day of week, month, year			
Watchdog Timer	Dual Watchdog Timer			
Display				
Size	10.4" (4:3)	12.1" (4:3)	15" (4:3)	17" (4:3)
Resolution	800 x 600		1024 x 768	1280 x 1024
Brightness	400 cd/m2			350 cd/m2
Contrast Ratio	500:1	700:1		
Backlight Life	50,000 hours			
Touch Panel	5-wire, resistive type; light transmission: 80 %			
LED Indicators				
Status	1 x System, 1 x Power	1 x System, 1 x Power, 2 x Programmable		
COM Ports				
Ports	2 x RS-232/RS-422/RS-485			
HMI				
Buzzer	Yes			
Rotary Switch	1 x 10 Position (0 ~ 9)			
Audio				
Cable	Earphone-out	Microphone-in and Earphone-out		
Ethernet				
Ports	1 x RJ-45 10/100/1000 Base-TX		2 x RJ-45 10/100/1000 Base-TX	
USB				
USB 2.0	2			4
Power				
Input Range	+10 ~ 30 VDC (1500 VDC Isolated)			
Redundant Power Inputs	Yes			
Consumption	22.0 W	27.0 W	29.0 W	36.0 W
Mechanical				
Casing	Metal			
Dimensions (W x L x H)	291 x 229 x 53 mm	323 x 254 x 63 mm	381 x 305 x 63 mm	413 x 359 x 69 mm
Panel Cut-Out (W x H)	274 x 211, ±1 mm	308 x 239, ±1 mm	364 x 288, ±1 mm	394 x 340, ±1 mm
Installation	Panel Mounting, VESA Mounting (75 x 75, 100 x 100)			
Ingress Protection Rating	Front panel: NEMA 4/IP65			
Environmental				
Operating Temperature	-20 °C ~ +60 °C			
Storage Temperature	-20 °C ~ +70 °C			
Humidity	10 ~ 90 % RH, Non-condensing			

■ Appearance

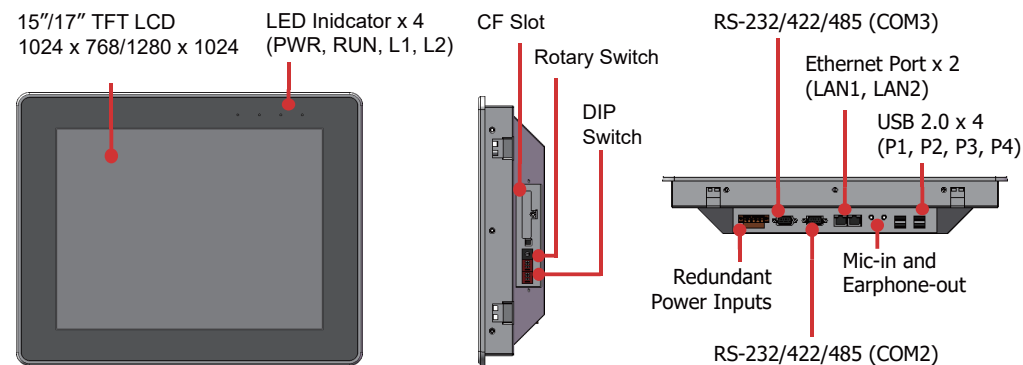
iPPC-4701-WES7/iPPC-4801-WES7



iPPC-5701-WES7/iPPC-5801-WES7

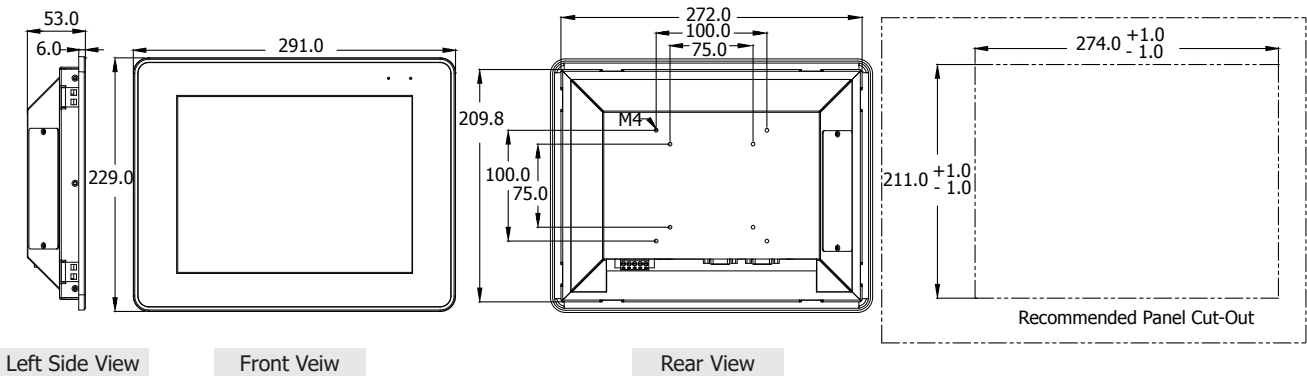


iPPC-6701-WES7/iPPC-7701-WES7/iPPC-6801-WES7/iPPC-7801-WES7



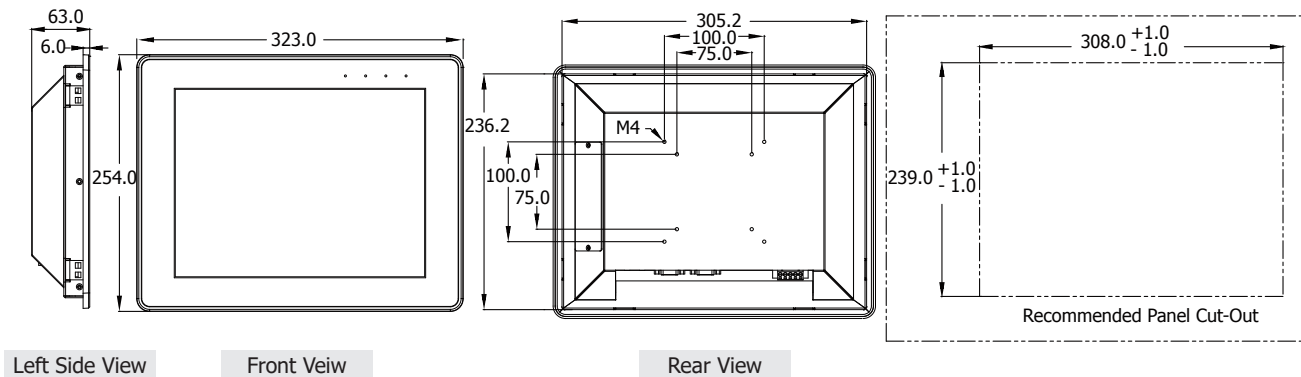
■ Dimensions (Units: mm)

iPPC-4701-WES7/iPPC-4801-WES7

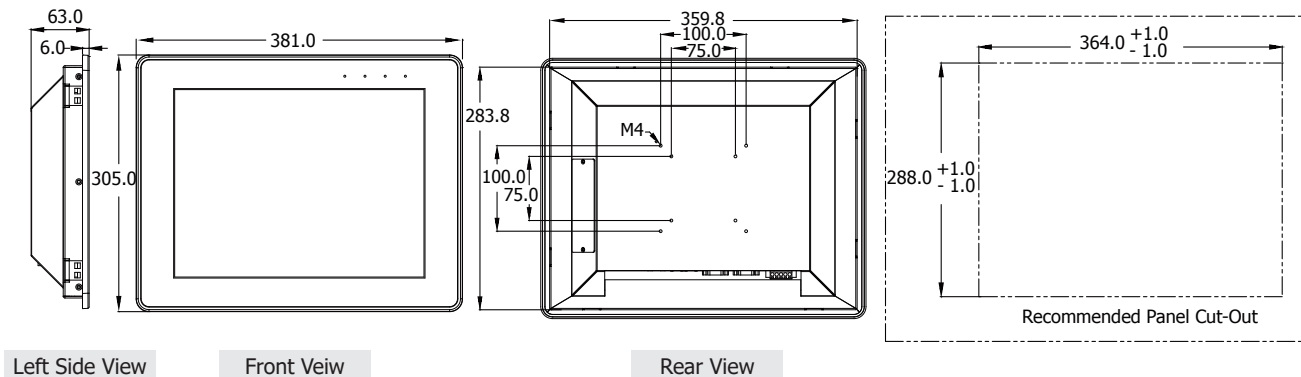


■ Dimensions (Units: mm)

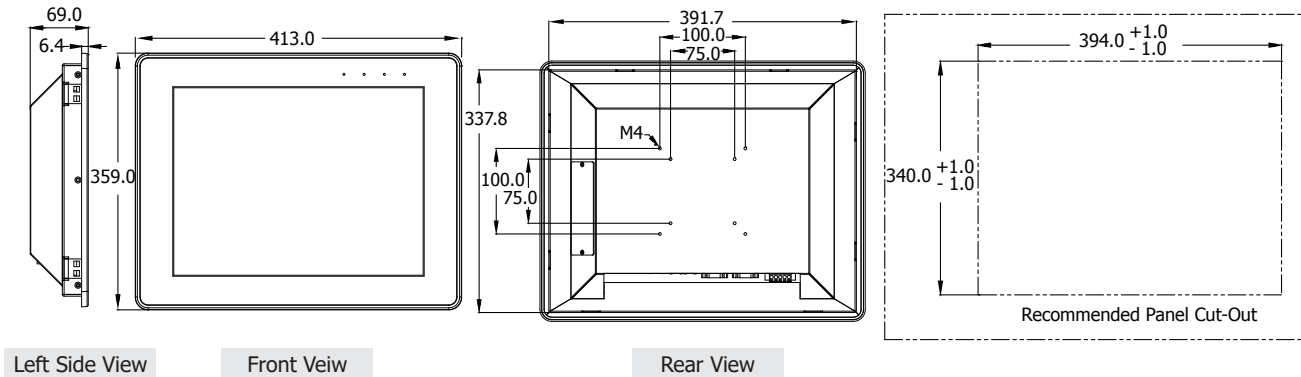
iPPC-5701-WES7/iPPC-5801-WES7



iPPC-6701-WES7/iPPC-6801-WES7



iPPC-7701-WES7/iPPC-7801-WES7



■ Ordering Information

iPPC-4701-WES7 CR	10.4" Panel PC with Atom E3827 CPU and WES7 (RoHS)
iPPC-5701-WES7 CR	12.1" Panel PC with Atom E3827 CPU and WES7 (RoHS)
iPPC-6701-WES7 CR	15" Panel PC with Atom E3827 CPU and WES7 (RoHS)
iPPC-7701-WES7 CR	17" Panel PC with Atom E3827 CPU and WES7 (RoHS)
iPPC-4801-WES7 CR	10.4" Panel PC with Atom E3845 CPU and WES7 (RoHS)
iPPC-5801-WES7 CR	12.1" Panel PC with Atom E3845 CPU and WES7 (RoHS)
iPPC-6801-WES7 CR	15" Panel PC with Atom E3845 CPU and WES7 (RoHS)
iPPC-7801-WES7 CR	17" Panel PC with Atom E3845 CPU and WES7 (RoHS)



iPPC-6731-WES7/iPPC-6831-WES7

15" Panel PC with Atom E3827/E3845 CPU, WES7,
and 3 I/O Slots

Features

- 15" LCD with Touch Panel
- Windows Embedded Standard 7 SP1
- Intel® Atom™ E3827 1.75 GHz/E3845 1.91 GHz
- Rich software support
- Various Memory and Storage
 - 2/4 GB DDR3 SDRAM
 - 16 KB EEPROM and 128 KB MRAM for data retention
- Various Communication Interfaces
 - 2 x RJ-45, 10/100/1000BASE-TX Ethernet Port
 - 3 x Serial Ports (RS-232/RS-485)
 - 3 x USB 2.0 (host)
- NEMA 4/IP65 Compliant Front Panel



Introduction

The iPPC-6731-WES7/iPPC-6831-WES7 series product is WES7 based Panel PC that combine computing, I/O, and operator interface into a single unit, and provides a perfect solution for integrating HMI, data acquisition and control in an individual PAC. It is equipped with an Intel Atom E3827/E3845 CPU, three I/O expansion slots, TFT LCD and a variety of connectives including dual Gigabit Ethernet, USB port, RS-232 and RS-485 interface. The operating system is pre-installed in the built-in mSATA SSD, and the storage can be expanded via a Compact Flash slot. The local I/O slots are available for using our I-8K or I-87K series I/O modules and remote I/O expansion is available for connecting to our Ethernet I/O modules or RS-485 I/O modules.

The iPPC-6731-WES7/iPPC-6831-WES7 is designed for panel mount installation, the front panel is NEMA 4/IP65 rated and can withstand sprayed water, humidity and extreme dust. It is also designed to operate over a wide -20°C to 60°C ambient temperature range, the fanless design offers the ultimate in reliability with no moving parts.

Since WES7 has the same Win32 API as Windows 7, most popular applications on desktop can run on WES7 based Panel PC.

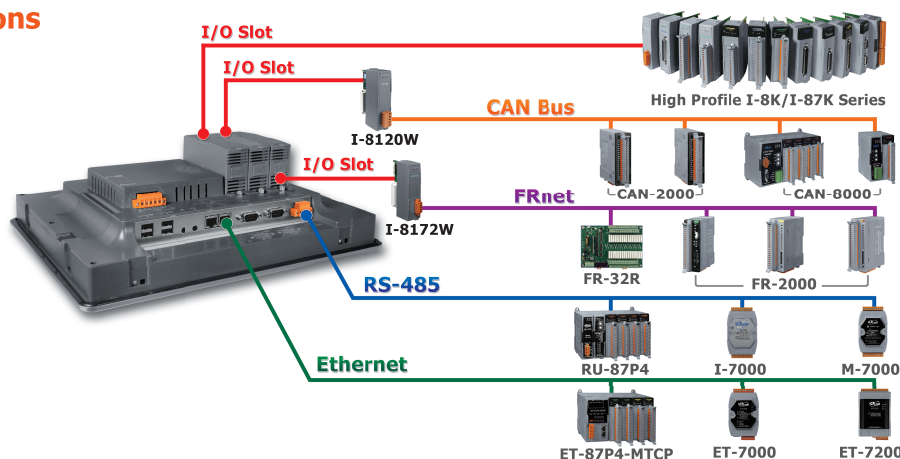
Windows Embedded Standard 7.0



WES7 has the same Win32 API as Windows 7. Most popular applications on desktop can be run on WES7. It's also compatible with rich Windows IDEs, such as Visual studio, Delphi, Borland C++ Builder, etc.

- Full Win32 API
- Remote Desktop Protocol 5.1
- Silverlight 5
- Enhanced Write Filter
- .NET Framework 3.5 SP1, 4.0, 4.5

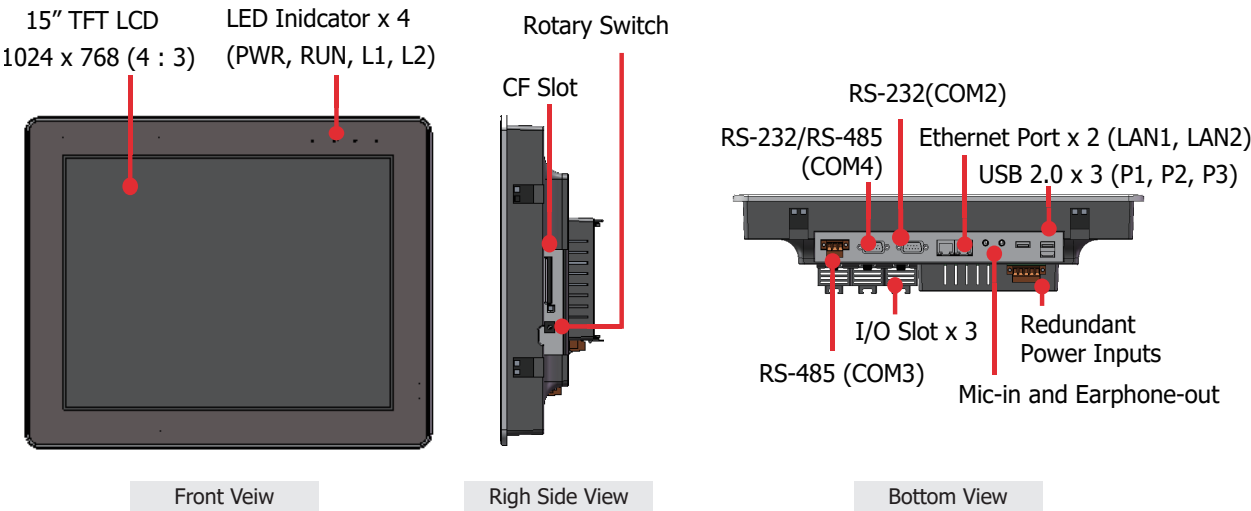
Applications



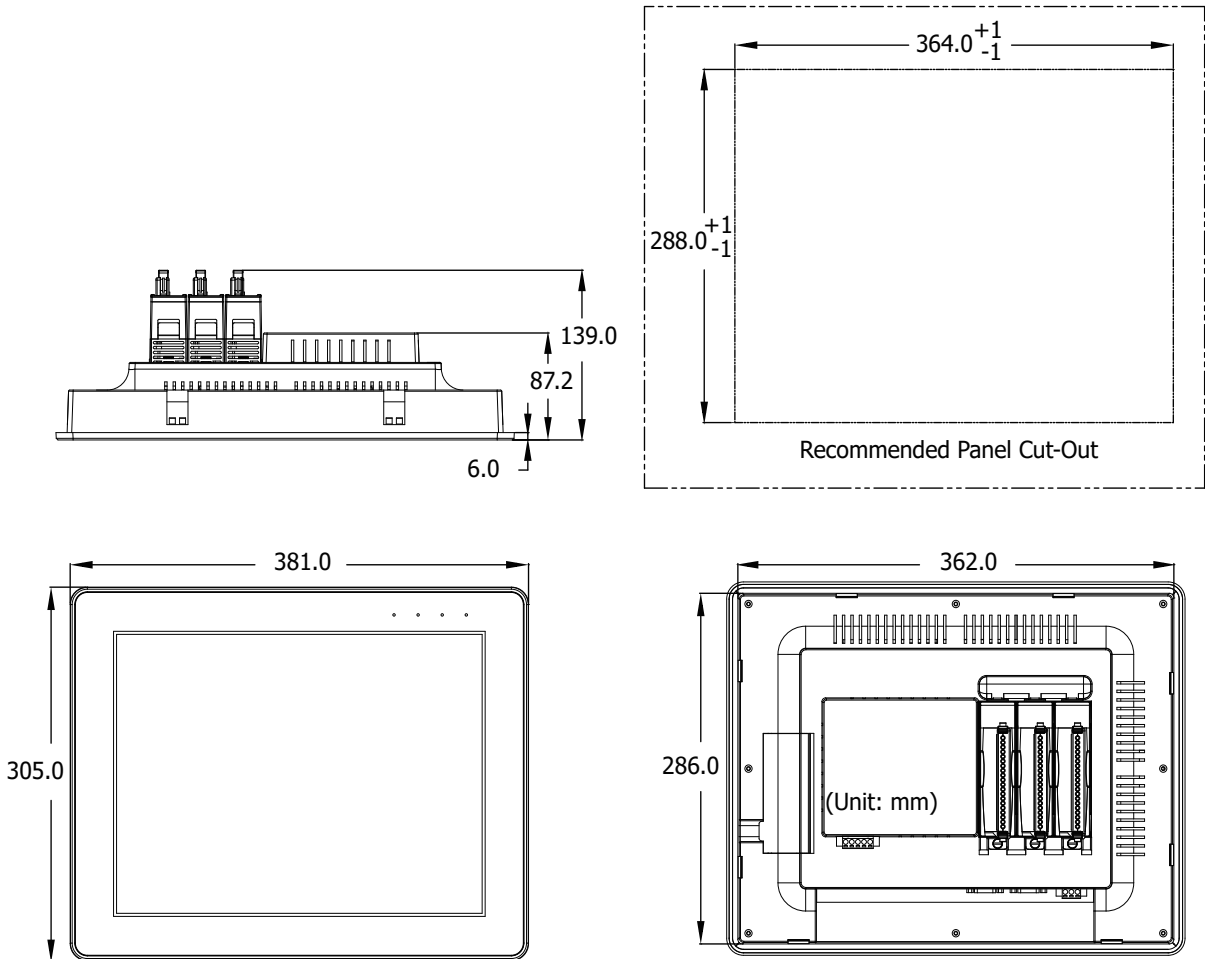
■ Specifications

Models	iPPC-6731-WES7		iPPC-6831-WES7	
Software				
OS	Windows Embedded Standard 7 SP1			
Service	IE11, FTP Server, IIS 7.0, ASP (Java Script, VB Script)			
Framework Support	.Net Framework 3.5, 4.0, 4.5			
Multilanguage Support	English, German, French, Spanish, Portuguese, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese			
SDK	DII for VC, DII for Visual Studio.Net			
Main Unit				
CPU	E3827, 1.75 GHz, 64-bit dual core	E3845, 1.91 GHz, 64-bit quad core		
64-bit Hardware Serial Number	Yes			
System Memory	2 GB DDR3 SDRAM	4 GB DDR3 SDRAM		
Storage	32 GB SSD, 16 GB CF card			
Non-Volatile Memory	128 KB MRAM, 16 KB EEPROM			
Real Time Clock	Provide seconds, minutes, hours, dates, day of week, month, year			
Watchdog Timer	Dual Watchdog Timer			
Display				
Size	15" (4:3)			
Resolution	1024 x 768			
Brightness	400 cd/m2			
Contrast Ratio	700:1			
Backlight Life	50,000 hours			
Touch Panel	5-wire, resistive type; light transmission: 80 %			
LED Indicators				
Status	1 x System, 1 x Power, 2 x Programmable			
I/O Expansion				
I/O Type	I-8K, I-87K series			
Slots	3			
COM Ports				
Ports	1 x RS-232, 1 x RS-485 (2500 VDC), 1 x RS-232/RS-485 (2500 VDC)			
HMI				
Buzzer	Yes			
Rotary Switch	1 x 10 Position (0 ~ 9)			
Audio				
Cable	Microphone-in and Earphone-out			
Ethernet				
Ports	2 x RJ-45, 10/100/1000 Base-TX			
USB				
USB 2.0	3			
Power				
Input Range	+10 ~ 30 VDC (1 kV Isolated)			
Redundant Power Inputs	Yes			
Consumption	25.0 W			
Mechanical				
Casing	Plastic			
Dimensions (W x L x H)	381 x 305 x 88 (mm)			
Panel Cut-Out (W x H)	366 x 290, ±1 (mm)			
Installation	Panel Mounting			
Ingress Protection Rating	Front panel: NEMA 4/IP65			
Weight	5 kg		5.1 kg	
Environmental				
Operating Temperature	-20 °C ~ +60 °C			
Storage Temperature	-20 °C ~ +70 °C			
Humidity	10 ~ 90 % RH, Non-condensing			

Appearance



Dimensions (Units: mm)



Ordering Information

iPPC-6731-WES7 CR	15" Panel PC with Atom E3827 CPU, WES7, and 3 I/O Slots (RoHS)
iPPC-6831-WES7 CR	15" Panel PC with Atom E3845 CPU, WES7, and 3 I/O Slots (RoHS)