iPPC-x801-IoT/iPPC-x901-IoT

10.4"/15" Panel PC with
Atom E3845/E3950 CPU and Win10 IoT

Features

- 10.4"and 15" TFT LCD with Touch Panel
- Windows 10 IoT Enterprise Inside
- Intel® Atom™ E3845 1.91 GHz / E3950 1.6 ~ 2.0 GHz
- Rich software support
- Various Memory and Storage
  - 4 GB DDR3 SDRAM and 8 GB DDR4
  - 16 KB EEPROM and 128 KB MRAM for data retention
  - 128 GB SSD
- 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-IoT series is Windows 10 IoT Enterprise 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 E3845/E3950 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.

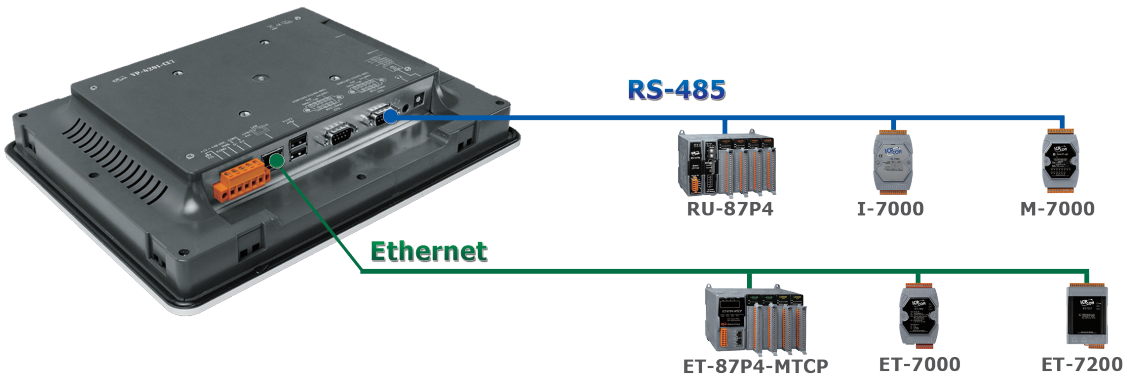
Windows 10 IoT

Windows 10 IoT

Windows 10 IoT is a member of the Windows 10 family that brings enterprise-class power, security, and manageability to the Internet of Things. It leverages Windows' embedded experience, ecosystem, and cloud connectivity, allowing organizations to create their Internet of Things with secure devices that can be quickly provisioned, easily managed, and seamlessly connected to an overall cloud strategy.

- Traditional Windows Shell with Advanced Lockdown Features• Remote Desktop Protocol 5.1
- Full Windows UI support (e.g. UWP, WinForms, etc)

Applications

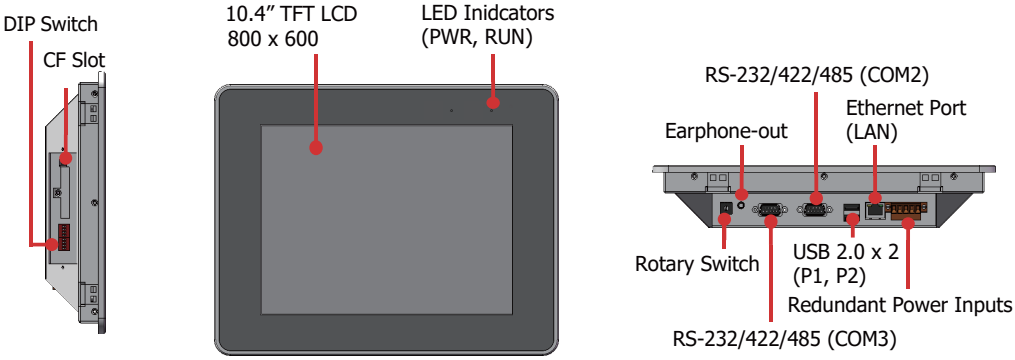


Specifications

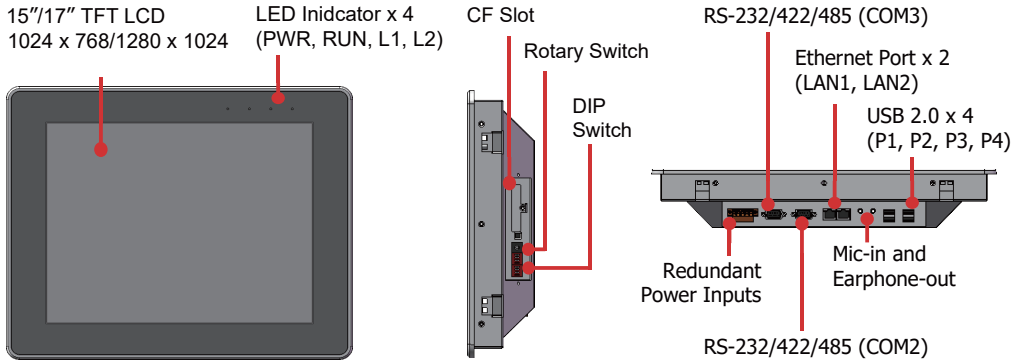
Models	iPPC-4801-IoT	iPPC-4901-IoT	iPPC-6801-IoT	iPPC-6901-IoT
Software				
OS	Windows 10 IoT Enterprise Inside			
Framework Support	.Net Framework 3.5, 4.0, 4.5 ,4.8			
Multilanguage Support	English, German, French, Spanish, Portuguese, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese			
SDK	Dll for VC, Dll for Visual Studio.Net			
Main Unit				
CPU	E3845, 1.91 GHz, 64-bit quad core	E3950, 1.6~2.0 GHz, 64-bit quad core	E3845, 1.91 GHz, 64-bit quad core	E3950, 1.6~2.0 GHz, 64-bit quad core
64-bit Hardware Serial Number	Yes			
System Memory	4 GB DDR3 SDRAM	8 GB DDR4	4 GB DDR3 SDRAM	8 GB DDR4
Storage	1 x 128 GB SSD, 1 x CF card slot			
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)		15" (4:3)	
Resolution	800 x 600		1024 x 768	
Brightness	400 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				
Jack	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		29.0 W	
Mechanical				
Casing	Metal			
Dimensions (W x L x H)	291 x 229 x 53 mm		381 x 305 x 63 mm	
Panel Cut-Out (W x H)	274 x 211, ±1 mm		364 x 288, ±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-4801-IoT

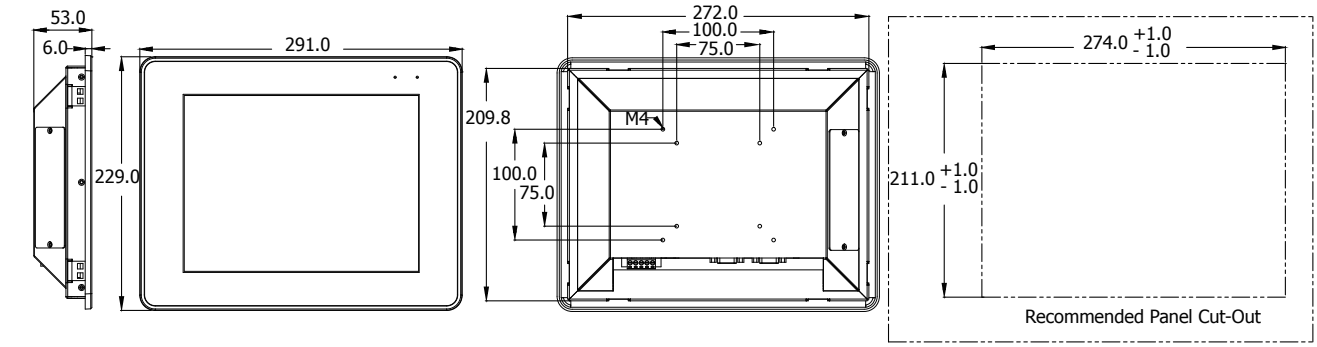


iPPC-6801-IoT



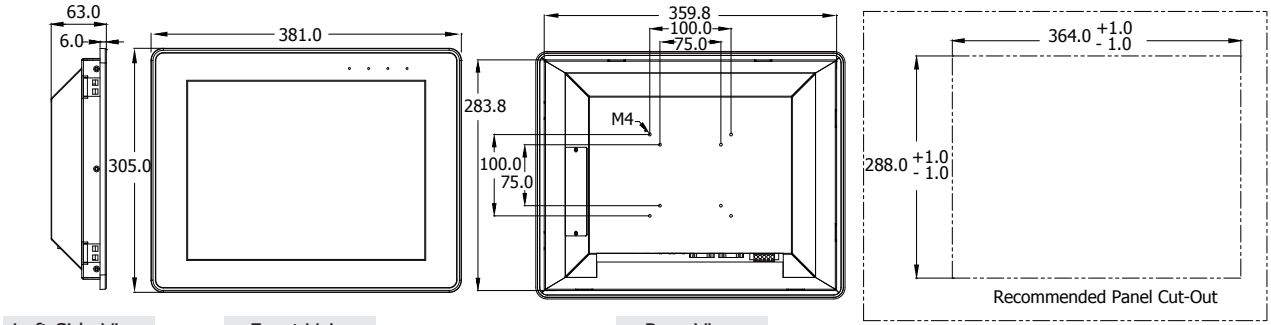
Dimensions (Units: mm)

iPPC-4801-IoT



Left Side View | Front Veiw | Rear View

iPPC-6801-IoT



Left Side View | Front Veiw | Rear View

Ordering Information

iPPC-4801-IoT CR	10.4" Panel PC with Atom E3845 CPU and Win10 IoT (RoHS)
iPPC-6801-IoT CR	15" Panel PC with Atom E3845 CPU and Win10 IoT (RoHS)
iPPC-4901-IoT CR	10.4" Panel PC with Atom E3950 CPU and Win10 IoT (RoHS)
iPPC-6901-IoT CR	15" Panel PC with Atom E3950 CPU and Win10 IoT (RoHS)

iPPC-6x31-IoT

15" Panel PC with Atom E3845/E3950 CPU, Win10 IoT, and 3 I/O Slots

Features

- 15" LCD with Touch Panel
- Windows 10 IoT Enterprise Indise
- Intel® Atom™ E3845 1.91 GHz / E3950 1.6 ~ 2.0 GHz
- Rich software support
- Various Memory and Storage
  - 4 GB DDR3 SDRAM and 8 GB DDR4
  - 16 KB EEPROM and 128 KB MRAM for data retention
  - 128 GB SSD
- 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-6x31-IoT series is Windows 10 IoT Enterprise 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 E3845/E3950 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.

Windows 10 IoT

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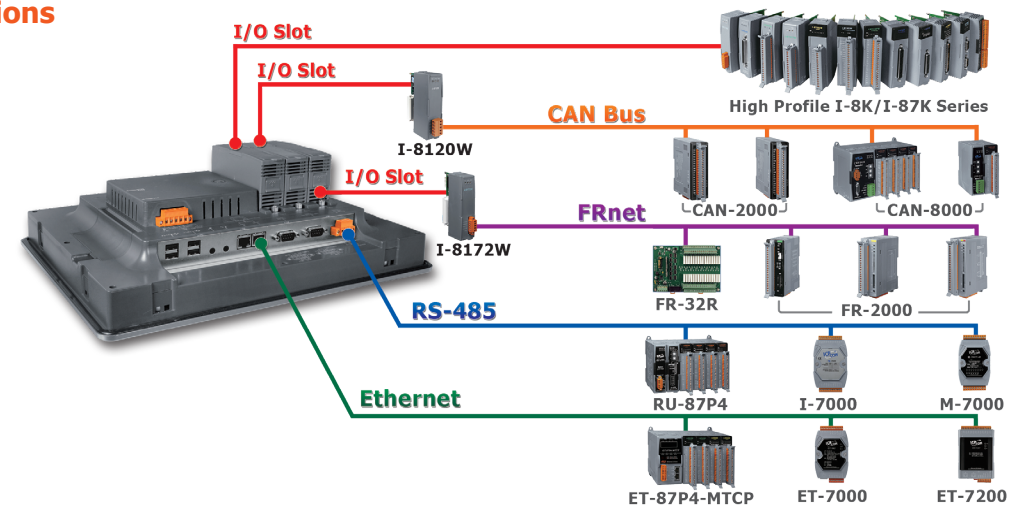
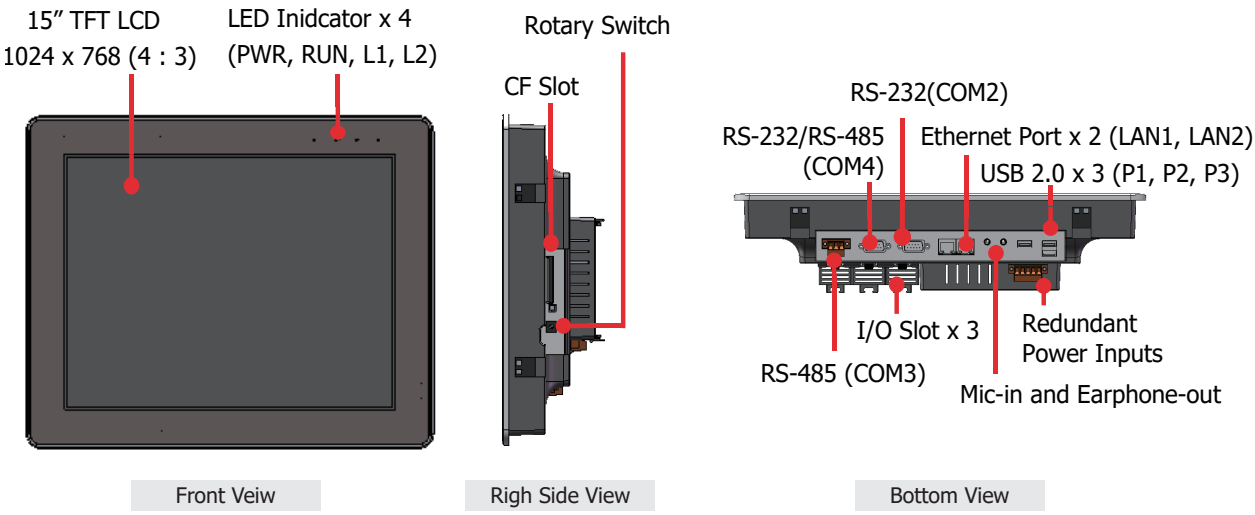
Applications



Specifications

Models	iPPC-6831-IoT	iPPC-6931-IoT
Software		
OS	Windows 10 IoT Enterprise Inside	
Framework Support	.Net Framework 3.5, 4.0, 4.5, 4.8	
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	E3950, 1.6~2.0 GHz, 64-bit quad core
64-bit Hardware Serial Number	Yes	
System Memory	4 GB DDR3 SDRAM	8 GB DDR4
Storage	1 x 128 GB SSD, 1 x CF card slot	
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		
Jack	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



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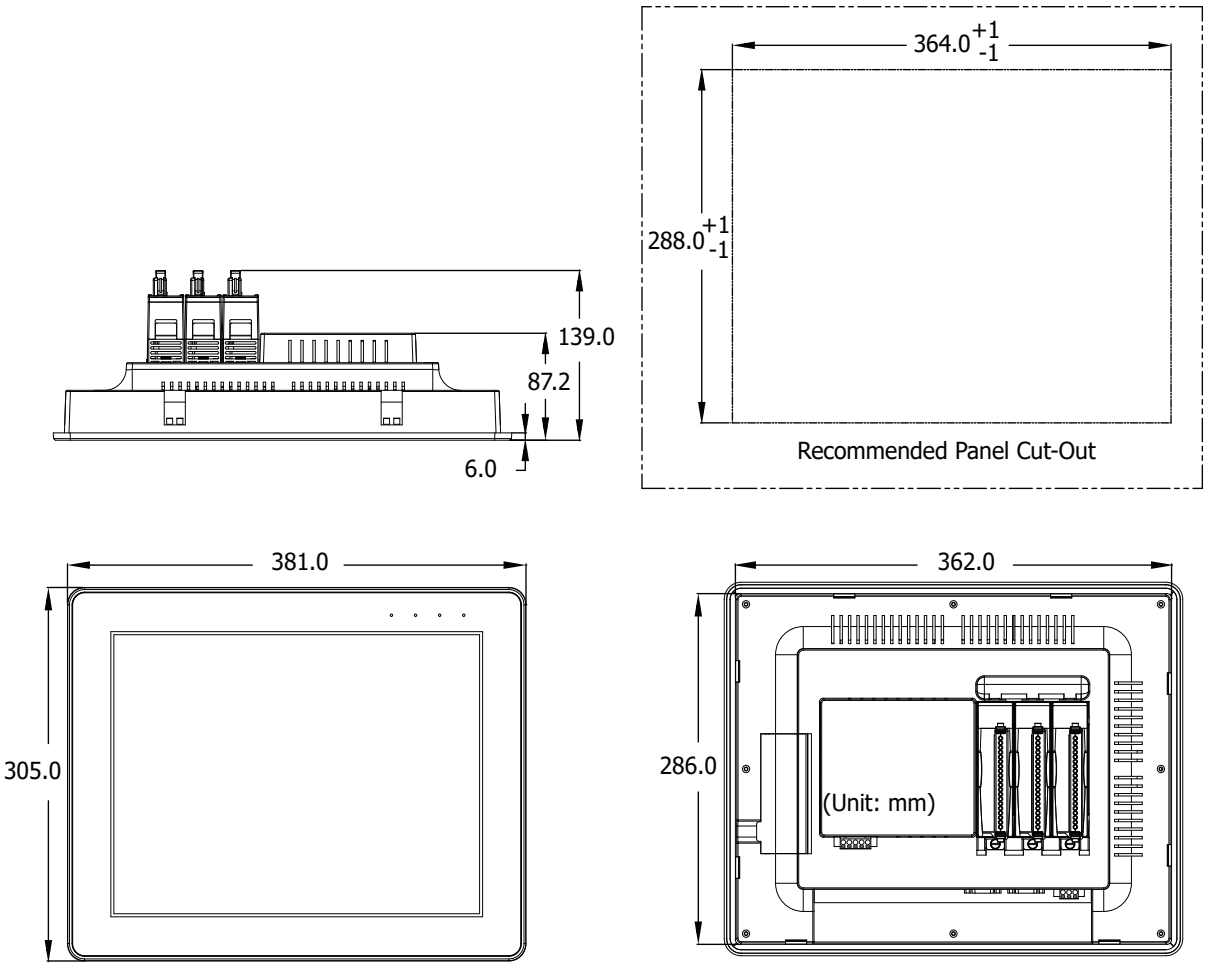

Ordering Information

iPPC-6831-IoT CR	15" Panel PC with Atom E3845 CPU, Win10 IoT, and 3 I/O Slots (RoHS)
iPPC-6931-IoT CR	15" Panel PC with Atom E3950 CPU, Win10 IoT, and 3 I/O Slots (RoHS)