

15" TFT LCD
iPPC-6831-WES7

Panel PC with 3 I/O Slots

Features

- 15" LCD with Touch Panel
- E3845 (1.91 GHz, 64-bit quad core)
- WES7 (Windows Embedded Standard 7)
- Support eLogger HMI (free)
- 3 I/O Expansion Slots
- NEMA 4/IP65 Compliant Front Panel
- Ultra-Rugged Construction and Reliable Design
- Operating Temperature：-20 °C ~ +60 °C

Introduction

The iPPC-6831-WES7 is a 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 PAC. It is equipped with an Intel Atom 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 from a Compact Flash slot. Local I/O slots are available to use our I-8K and I-87K series I/O modules and remote I/O expansion is available to use our Ethernet I/O modules and RS-485 I/O modules. The 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. 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.

WES7 Embedded OS

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.

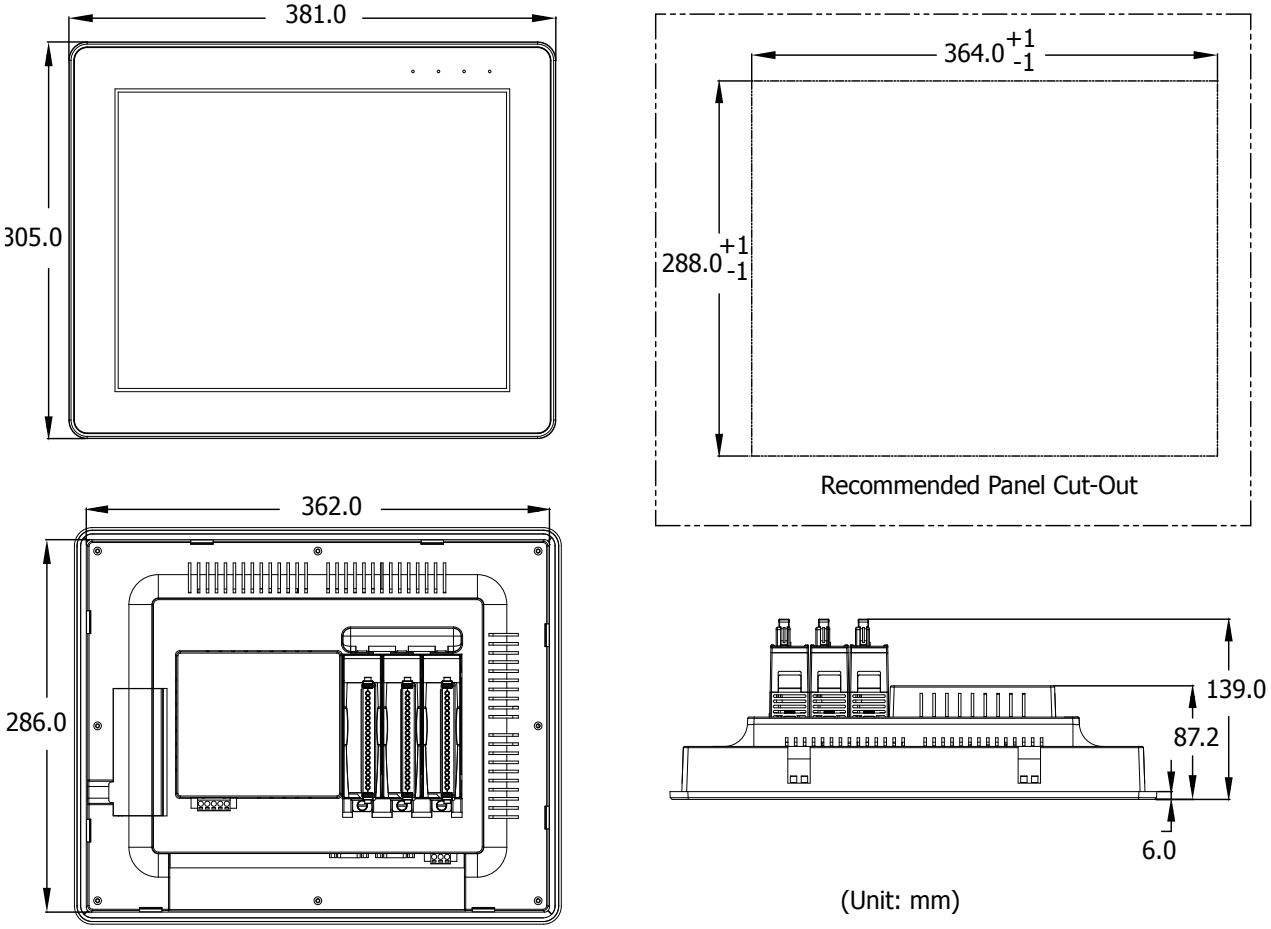
Windows Embedded Standard 7

- Full Win32 API
- Silverlight 5
- Enhanced Write Filter
- Remote Desktop Protocol 7.1
- .NET Framework 3.5, 4.0, 4.5

Specifications

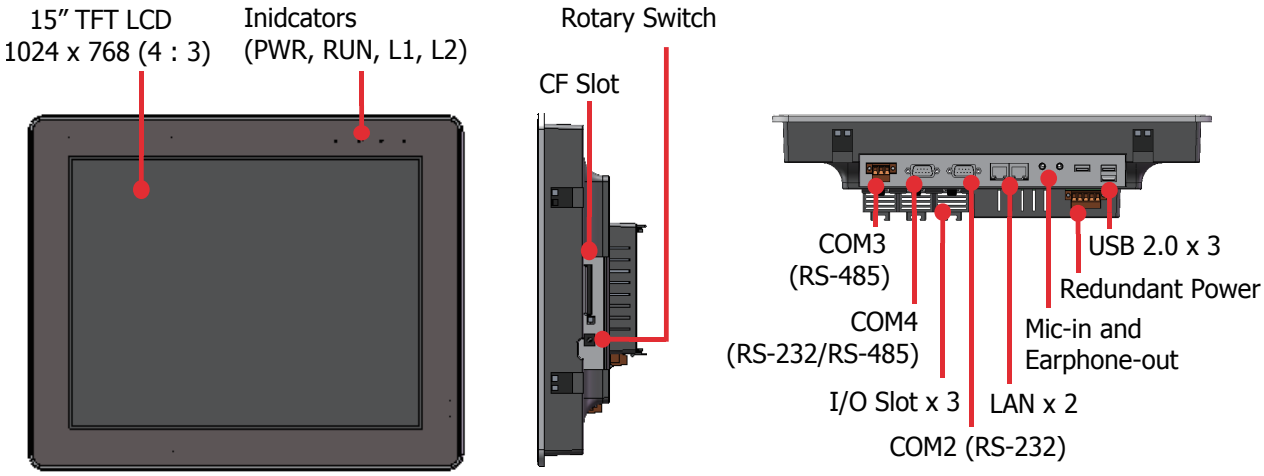
LCD	
Diagonal Size	15"
Resolution	1024 x 768
Brightness (cd/m2)	400
Contrast Ratio	500：1
LED Backlight Life (hrs)	50,000
Touch Panel	5-wire, resistive type; light transmission: 80 %
LED Indicator	4 (Run, PWR, L1, L2; L1 and L2 for user programmable)
System Software	
OS	Microsoft Windows Embedded Standard 7 SP1
Framework Support	.Net Framework 3.5, 4.0, 4.5
Embedded Service	IE11, FTP Server, IIS 7.0, ASP (Java Script, VB Script)
SDK Provided	Dll for Visual Studio.Net
Multilanguage Support	English, German, French, Spanish, Portuguese, Russian, Italian, Korean, Japanese, Simplified Chinese, Traditional Chinese
CPU Module	
CPU	E3845 (1.91 GHz, 64-bit quad core)
SDRAM (DDR3)	4 GB
MRAM	128 KB
Flash (SSD)	mSATA slot with one 32 GB SSD
EEPROM	16 KB
Memory Expansion	CF slot with a 8 GB CF card (support up to 32 GB)
RTC (Real Time Clock)	Provide second, minute, hour, date, day of week, month, year
64-bit Hardware Serial Number	Yes, for software copy protection
Rotary Switch	Yes (0 ~ 9)
Communication Ports	
Ethernet	2 x RJ-45 10/100/1000 Base-TX
USB 2.0	3
COM 2	RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI, GND); Non-isolated
COM 3	RS-485 (Data+, Data-, GND); 2500 V_{DC} isolated
COM 4	RS-232/RS-485 (RxD, TxD, CTS, RTS, GND for RS-232, Data+, Data- for RS-485); 2500 V_{DC} isolated
Audio	Mic-in and earphone-out
I/O Expansion Slots	
Slot Number	3 (Support High Profile I-8K and I-87K Modules)
Mechanical	
Dimensions (W x H x D)	381 mm x 305 mm x 87 mm
Panel Cut-Out (W x H)	364 x 288, ±1 mm
Installation	Panel Mounting
Ingress Protection	Front panel: NEMA 4/IP65
Weight	3.1 kg estimate
Environmental	
Operating Temperature	-20 °C ~ +60 °C
Storage Temperature	-20 °C ~ +70 °C
Ambient Relative Humidity	10 % ~ 90 % RH (non-condensing)
Power	
Input Range	+10 V_{DC} ~ +30 V_{DC}
Redundant Power Inputs	Yes
Isolation	1 kV
Consumption	25 W

Dimensions



(Unit: mm)

Appearance



Ordering Information

iPPC-6831-WES7	15" Panel PC with Atom E3845 CPU and WES7 OS

Accessories

DR-120-24	24 V/5 A, 120 W Single Output Industrial DIN Rail Power Supply
MDR-60-24 CR	24 VDC/2.5 A, 60 W Power Supply with DIN-Rail Mounting (RoHS)