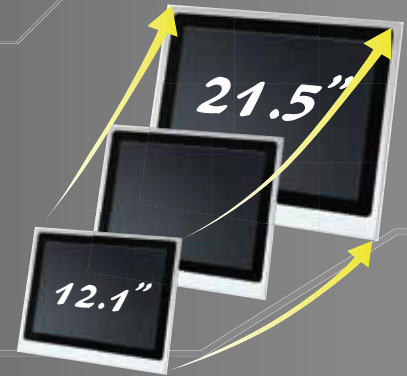# PEDA Touch Panel PC Series

Modularized Fan-free Panel PC with High Performance and Low Power Consumption
Powered by Intel® Haswell ULT SoC Processor

In industrial PC markets, systems can be applied in versatile applications so it's always a good strategy to keep high flexibility and expandability, and that's what PEDA Series focuses on.
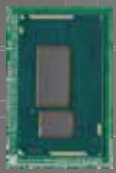
Product Introduction

PEDA Panel PC sets a new standard in HMI solutions. Remarkable advance and brand new features of this incredible system makes it powerful for most industrial application markets. By adopting the 4th generation Intel® Core™ processor with TDP as low as 15W, PEDA Panel PC is able to provide great computing ability while remain low power consumption as well as value-optimized pricing.

Perfect thermal dissipation and a truly rugged chassis with an IP65 aluminum bezel allows the system to operate in harsh industrial environments; also, thanks to plentiful expansion modules and I/O interfaces, it can be used for a variety of purposes. In conclusion, PEDA Panel PC is a well-integrated and flexible system working reliably even in extreme conditions, making it an ideal platform for machine control system, factory automation, indoor/outdoor vending machine, etc.

21.5"
12.1"

New! 1-Chip BGA Solution

· CPU and PCH Integrated into single BGA package

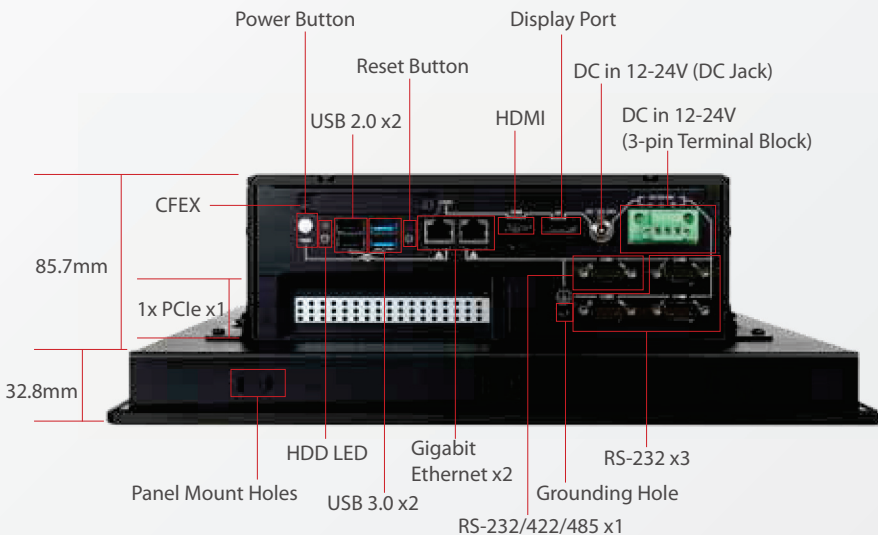· 15W & 28W TDPs, 6W and below SDP

· Supports LPDDR3 and DDR3L memory

Traditional 2-Chip platform

· 2 chip scalable solution:CPU and chipset

· BGA and rPGA packages

· 57W,47W,and 37W TDPs

· Supports DDR3L Memory

· GT3e graphics

▌ Panel PC with Intel® ULT SoC Processor

The 4th generation Intel® Core™ processor features ultra-low TDP (thermal design power) and new technology to deliver a single SoC (system on chip) solution. By utilizing this latest technology, the fan-free PEDA Panel PC can optimize thermal dissipation as well as simplify the mechanics of board and chassis to achieve an extremely reliable and stable system. Also, the system can be designed to be very small and compact.

Power Button
Reset Button
Display Port
DC in 12-24V (DC Jack)
USB 2.0 x2
HDMI
DC in 12-24V (3-pin Terminal Block)
CFEX
85.7mm
1x PCIe x1
32.8mm
HDD LED
Gigabit Ethernet x2
RS-232 x3
Panel Mount Holes
USB 3.0 x2
Grounding Hole
RS-232/422/485 x1

Modularization Concept of PEDA Series

* The picture of PEDA-S1530

Unique Box PC and Touch Panel Screen Design

Modularization is the core design concept for PEDA Panel PC, which could be disassembled to an independent "Box PC" and a "touch panel display". As a result, users can choose different sizes of panel from 12.1″ to 21.5″ to integrate with the same "Box PC" by one single cable.

Add-on Card Expansion Module

To enhance the flexibility, expansion modules for supplementary add-on cards are options for PEDA Panel PC. With Portwell's patent design of creative expansion cassettes, overheat after add-on cards inserted is no longer a problem, realizing a real rugged fan-free system. Installation and replacement of add-on cards are easy in innovative PCIe expansion modules.

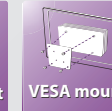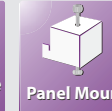**Easily install or replace an add-on card step by step**

Removable HDD Tray and CFEX Cover for easy installation and maintenance.

Ordering Guide

AL6-3177	(R).ATO.PEDA-S1230-4300-00. 12.1" Flat 5WR Touch & Haswell-ULT Core™ i5 4300U Panel PC with 1 x PCIe x 1 expansion slot
AL6-3167	(R).ATO.PEDA-S1530-4300-00.15" Flat 5WR Touch & Haswell-ULT Core™ i5 4300U Panel PC with 1 x PCIe x 1 expansion slot
AL6-3183	(R).ATO.PEDA-S1730-4300-00. 17" Flat 5WR Touch & Haswell-ULT Core™ i5 4300U Panel PC with 1 x PCIe x 1 expansion slot
AL6-3181	(R).ATO.PEDA-S1930-4300-00. 19" Flat 5WR Touch & Haswell-ULT Core™ i5 4300U Panel PC with 1 x PCIe x 1 expansion slot
AL6-3179	(R).ATO.PEDA-S2130-4300-00. 21.5" Flat 5WR Touch & Haswell-ULT Core™ i5 4300U Panel PC with 1 x PCIe x 1 expansion slot

Product Features

intel HASWELL | Fan Free | True-Flat | IP65 | WiFi ((3G)) | Wide Voltage 12-24V | Panel Mount | VESA mount | Add-on Card | iAMT | CFEX
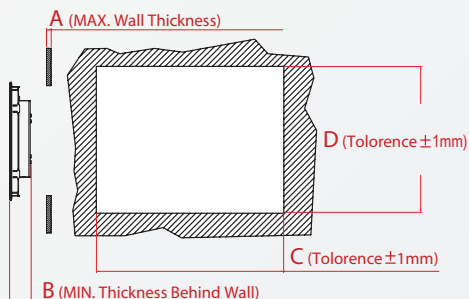
PEDA Quick Selection Guide

PEDA 12.1"/15"/17"/19"/21.5"

Model Name	PEDA-S1230	PEDA-S1530	PEDA-S1730	PEDA-S1930	PEDA-S2130
Display					
LCD Size	12.1"	15"	17"	19"	21.5"
Resolution	XGA 1024x768	XGA 1024x768	SXGA1280x1024	SXGA 1280x1024	FHD 1920x1080
Brightness	500 cd/m2	400 cd/m2	350 cd/m2	350 cd/m2	250 cd/m2
Contrast Ratio	700:1	700:1	1000:1	1000:1	5000:1
Backlight	LED type	LED type	LED type	LED type	LED type
Touch Screen	True Flat 5-Wire Resistive Single Touch (P-CAP Touch by Project)				
System					
SoC	Intel® Celeron™ 2980U (1.60GHz) & Intel® Core™ i5-4300U (1.90GHz)				
Memory	2 x DDR3L SO-DIMM 1333-1600 MHz max up to 16GB				
BIOS	AMI				
Graphics	Intel® HD Graphics 4400				
LVDS	Single/ Dual Channel 24-bit				
LAN Chipset	Intel® WG1210AT Gigabit Ethernet & Intel® WG1218LM Gigabit Ethernet (Support iAMT)				
Audio	Realte High Definition Audio Codec				
Watchdog Timer	1~255 levels reset				
Storage Device	2.5" SATA HDD/ SSD, mSATA device, CEFX up to 128GB				
OS	Windows 7/ Windows 8.1 /Linux™				
I/O Interface					
Series Port	3x RS-232,1 x RS-232/422/485				
Display	1x HDMI,1 x Display Port				
USB	2x USB 2.0, 2 x USB 3.0				
Ethernet	2x Gigabit Ethernet				
Others	2 x SMA Antenna hole for WiFi/3G Solution				
Expansion	1 x Half-size PCIe x 4 (x1 signal) expansion slot, 1x Full-size Mini-PCIe socket 1 x Half-size Mini-PCIe socket with mSATA support				
Mechanical					
Dimesion(mm)(WxDxH)	307 x 253.2 x 117.9 mm	367 x 312 x 118.6 mm	387 x 339.8 x121.8 mm	433.2 x 373.3 x121.9 mm	529.3 x 338.2 x 121.9 mm
Mounting (mm)	VESA Mount 75 x 75, 100 x 100; Panel Mount				
Weight (Kg)(N)	5 Kg	8 Kg	10 Kg	12 Kg	15 Kg
Weight (Kg)(G)	8 Kg	11.4 Kg	12.5 Kg	15 Kg	18 Kg
Power					
Power Supply	DC 12~24V input by 1 x lockable DC jack & 1 x 3-pin terminal block connector				
Power Consumption (Working without PCIe card)	32.4W (Max); Idle: 22W; Sleep: 3.5W	53W (Max); Idle: 32W; Sleep: 2W	50.2W (Max); Idle: 38W; Sleep: 3.5W	48.4W (Max); Idle: 38.5W; Sleep: 3.5W	48W (Max); Idle: 37W; Sleep: 3.4W
Environmental					
OP /Storage Temp	0 ~ 50°C / -20~60°C (20~90%, non-condensing)				
Vibration	1.0G(CFEX/SSD) and 0.5G(HDD) , Power on & 2.16G, Packaged;5~500Hz				
Shock	15G peak acceleration,11 ms (Power on condition)				
Drop	Packaged with Carton from 96.5cm (1-Corner, 3-Axis, 6-Face)				
Front Panel Protection	IP65 (Front) / IP20 (Rear) (IEC 60529 Edition 2.1 Standard)				
Certificate	CE/FCC Class A				

Cut out Dimension

A (MAX. Wall Thickness)

D (Tolorence ±1mm)

C (Tolorence ±1mm)

B (MIN. Thickness Behind Wall)

PEDA

	A (mm)	B (mm)	C (mm)	D (mm)	Mounting Kits (pcs)
PEDA-S1230	<10	118	310	256.3	x10
PEDA-S1530	<8.5	118.6	353.7	297.6	x10
PEDA-S1730	<8.5	121.8	390	343	x18
PEDA-S1930	<8.5	122	407.4	447.2	x18
PEDA-S2130	<8.5	122	533	343	x18