



## VP-1231-CE7/VP-4231-CE7/VP-6231-CE7

Standard ViewPAC with 3 I/O Slots

### Features

- 5.7", 10.4 and 15" TFT LCD
- Cortex-A8, 32-bit and 1 GHz CPU
- CE7 (Windows Embedded Compact 7)
- Hard Real-Time Capability
- 64-bit Hardware Serial Number
- Support eLogger HMI (free)
- Dual Watchdog Timers
- Ultra-Rugged Construction and Reliable Design
- Operating Temperature: -20 °C to +70 °C



### Introduction

The VP-x231-CE7 are CE7 based ViewPAC 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 ARM Cortex-A8 (32-bit and 1 GHz) CPU, TFT LCD and a variety of input/output ports (USB, Ethernet, RS-232/485). 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. Designed to operate over a wide -10 °C to 60 °C ambient temperature range, the fanless design offers the ultimate in reliability with no moving parts.

Windows Embedded Compact 7 is a componentized, hard real-time, high performance, and highly reliable operating system. CE7 delivers rich user experiences and a unique connection to Windows PCs, servers, services, and devices.

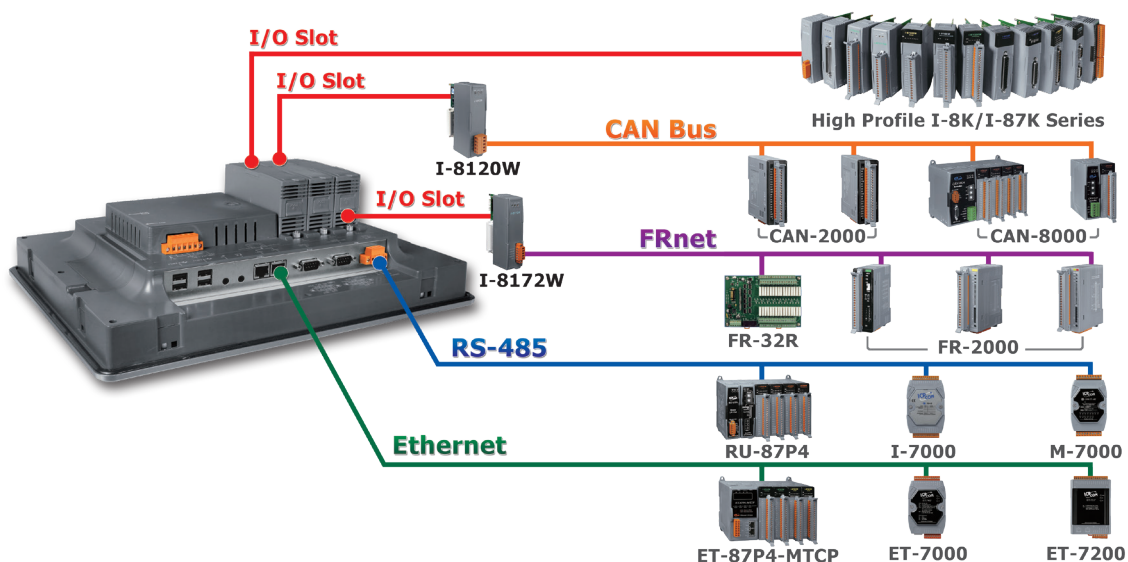
### Windows Embedded Compact 7



Windows Embedded Compact 7 is a compact and hard real-time OS used to quickly create time critical and high performance applications. Using CE7 gives an ability to run PC-based control software such as Visual Basic .NET, Virtual C#, SCADA software, SoftPLC... etc.

- FTP Server
- Web Server
- SQL Compact Edition 3.5
- .NET Compact Framework 3.5
- Virtual CE Pro (VECP)

### Applications

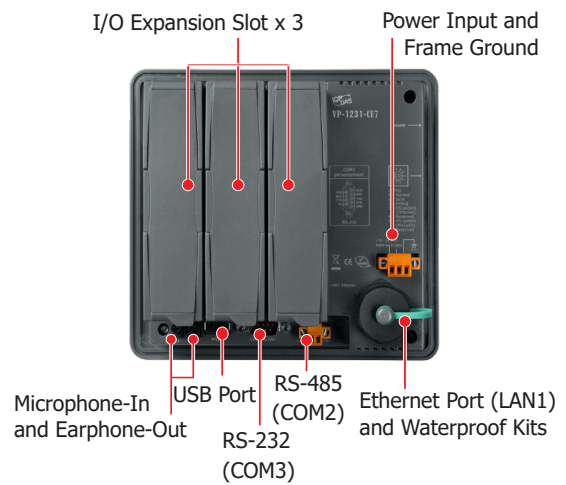
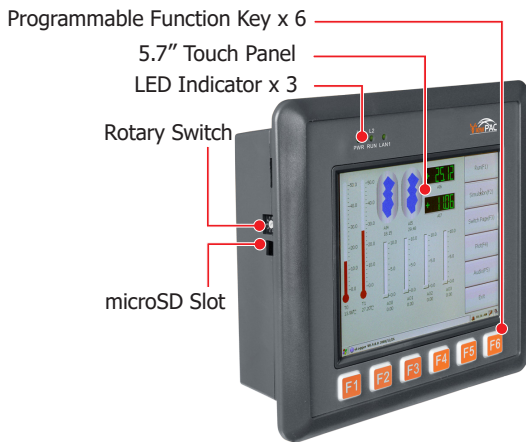


## Specifications

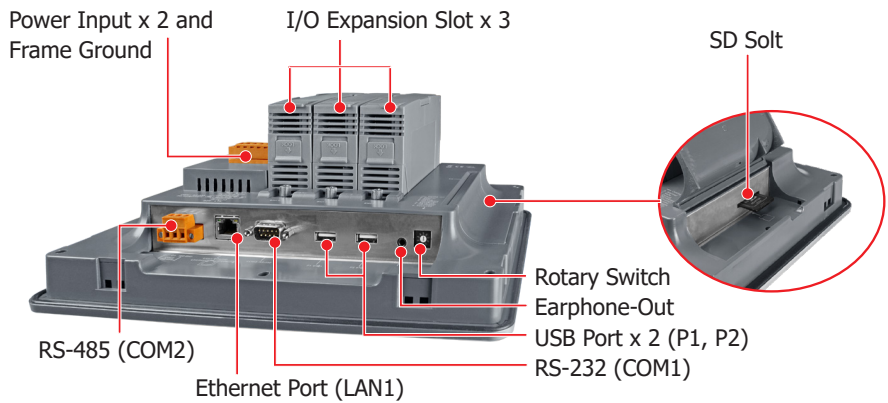
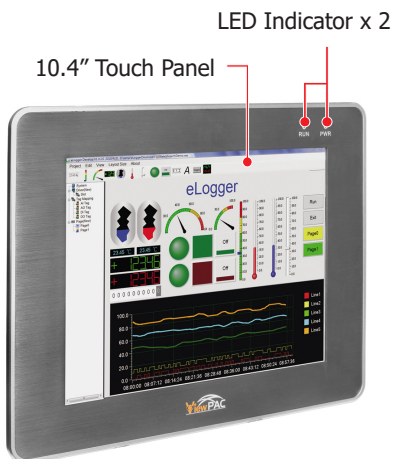
Models	VP-1231-CE7	VP-4231-CE7	VP-6231-CE7
<b>Display</b>			
Size	5.7" TFT LCD	10.4" TFT LCD	15" TFT LCD
Resolution	640 x 480	800 x 600	1024 x 768
Touch Panel	Yes		
Rubber Keypad	6 Keys	-	
<b>System Software</b>			
OS	Windows CE 7.0		
Framework Support	.NET Compact Framework 3.5		
Embedded Service	FTP server, Web server (supports VB script, JAVA script), SQL Compact Edition 3.5		
SDK Provided	DII for VC, DII for Visual Studio.Net 2008		
Multilanguage Support	English, German, French, Spanish, Russian, Italian, Korean, Simplified Chinese, Traditional Chinese		
<b>CPU Module</b>			
CPU	Cortex-A8 (32-bit and 1 GHz)		
SDRAM	512 MB		
MRAM	128 MB		
Flash	256 MB		
EEPROM	16 KB		
Expansion Flash Memory	microSD socket with a 4 GB microSD card (support up to 32 GB)	SD socket with a 4 GB microSD card and a microSD adapter (support up to 32 GB)	
RTC (Real Time Clock)	Provide seconds, minutes, hours, day of week/month, month and year, valid from 1980 to 2079		
64-bit Hardware Serial Number	Yes		
Dual Watchdog Timer	Yes		
Rotary Switch	Yes (0 ~ 9)		
LED Indicator	3 Dual-Color LEDs (PWR, RUN, LAN1, L1, L2, L3; L1 ~ L3 For User Programmable)	2 LEDs (PWR, RUN)	
Audio	Microphone-In and Earphone-Out	Earphone-Out	Microphone-In and Earphone-Out
<b>Communication Interface</b>			
Ethernet	RJ-45 x 1, 110/100/1000 BASE-T (Auto-negotiating, Auto MDI/MDI-X, LED indicators)		
USB 2.0 (host)	1	2	
COM 0	Internal communication with I-87K modules in slots		
COM 1	RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); Non-isolated		
COM 2	RS-485 (D2+, D2-); self-tuner ASIC inside; 2500 VDC Isolated		
COM 3	RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); Non-isolated		
<b>I/O Expansion Slot</b>			
Slot Number	3 (For High Profile I-8K and I-87K Modules Only)		
<b>Mechanical</b>			
Dimensions (W x H x D)	182 mm x 158 mm x 125 mm	293 mm x 229 mm x 129 mm	381 mm x 305 mm x 139 mm
Panel Cut-out (W x H)	153 mm x 136 mm +/- 1.0 mm	276 mm x 214 mm +/- 1.0 mm	366 mm x 290 mm +/- 1.0 mm
Ingress Protection	Front panel: IP65		
<b>Environmental</b>			
Operating Temperature	-20 °C ~ +70 °C		
Storage Temperature	-30 °C ~ +80 °C		
Ambient Relative Humidity	10% ~ 90% RH, non-condensing		
<b>Power</b>			
Input Range	+10 ~ +30 VDC		
Input Range	-	Yes	
Isolation	1 kV		
Capacity	2.5 A, 5 V supply to I/O expansion slots		
Consumption	0.3 A @ 24 VDC	0.45 A @ 24 VDC	0.65 A @ 24 VDC

## Appearance

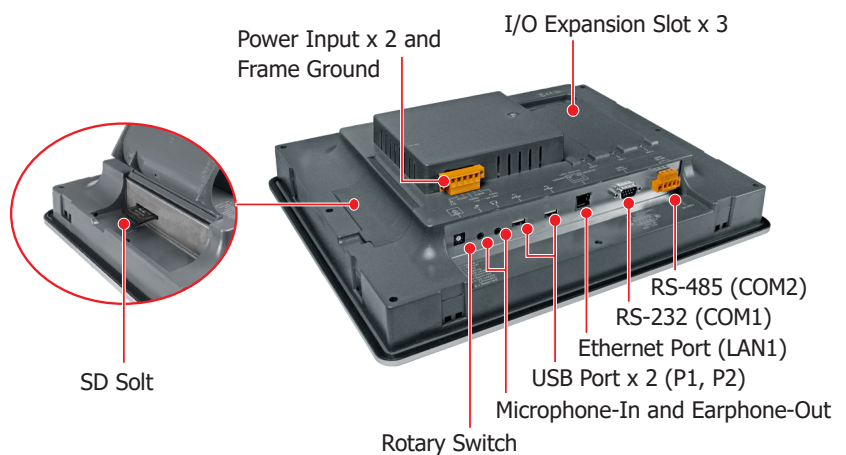
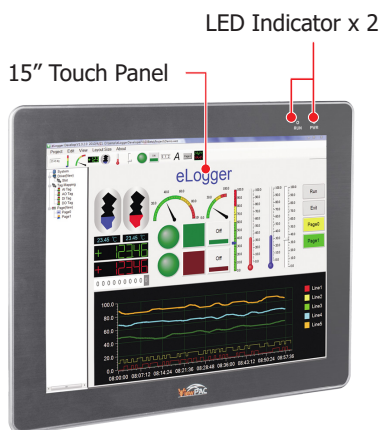
### VP-1231-CE7



### VP-4231-CE7

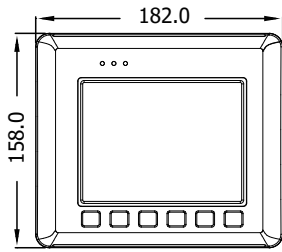


### VP-6231-CE7

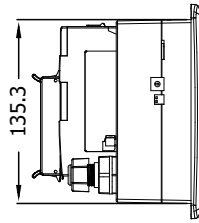


## ■ Dimensions (Units: mm)

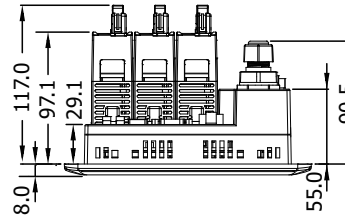
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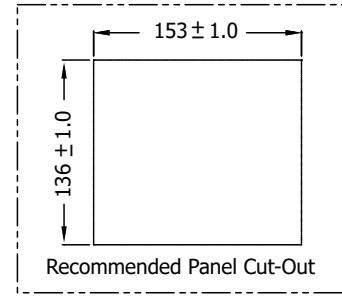
Front View



Left Side View

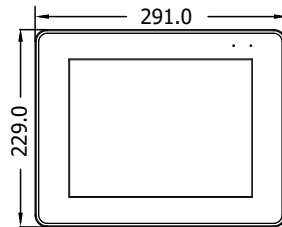


Top View

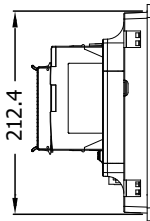


Recommended Panel Cut-Out

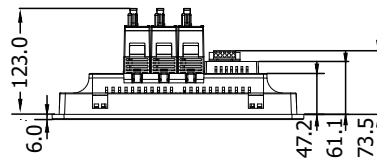
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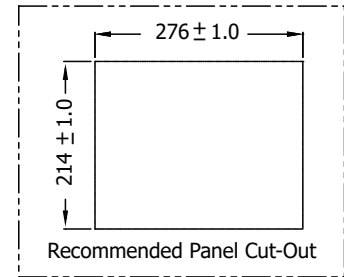
Front View



Left Side View

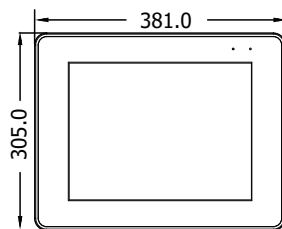


Top View

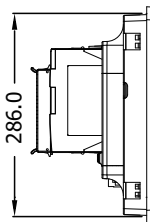


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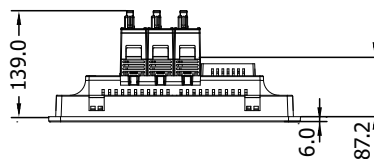
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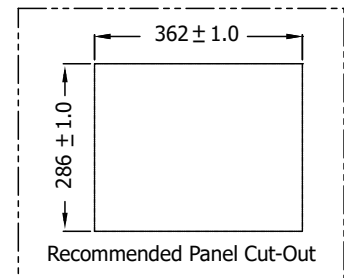
Front View



Left Side View



Top View



Recommended Panel Cut-Out

## ■ Ordering Information

<b>VP-1231-CE7 CR</b>	Standard ViewPAC with 5.7" LCD, Cortex-A8, 1 GHz CPU and CE7 OS (RoHS)
<b>VP-4231-CE7 CR</b>	Standard ViewPAC with 10.4" LCD, Cortex-A8, 1 GHz CPU and CE7 OS (RoHS)
<b>VP-6231-CE7 CR</b>	Standard ViewPAC with 15" LCD, Cortex-A8, 1 GHz CPU and CE7 OS (RoHS)