



## Features

- Cortex-A8, 1GHz CPU
- Windows CE 7.0 Professional
- 256 MB DDR3 and 256 MB Flash
- 64-bit Hardware Serial Number
- Hard Real-Time Capability
- I/O Expansion Bus
- 10/100/1000M Ethernet Ports
- 3 Serial Ports (RS-232/485)
- Operating Temperature: -25 ~ +75°C
- Industrial Tri-band 3G module
- 3G modem



## Introduction

The WP-5231PM-3GWA-CE7 is equipped a Cortex-A8 CPU (1 GHz) and running a windows CE 7.0 operating system. The optional I/O expansion board, XV-board, provides high-protection I/O. Using the built-in Flash and microSD, the WP-5231PM-3GWA-CE7 can save application program, image file and data.

The 3G module work on frequencies of WCDMA 2100/1900/900/850 MHz and GSM 850/900/1800/1900 MHz. These modules utilize the 3G network for convenient and inexpensive data transfer from remote instruments, meters, computers or control systems in either live data or packet data. These modules has the integrated TCP/IP stack so that even simple controllers with serial communications ports can be connected to the modem without the need for special driver implementation. With the features of theirs, the systems can be SMS and GPRS or 3G connection applications with our PAC.

## Windows CE 7.0



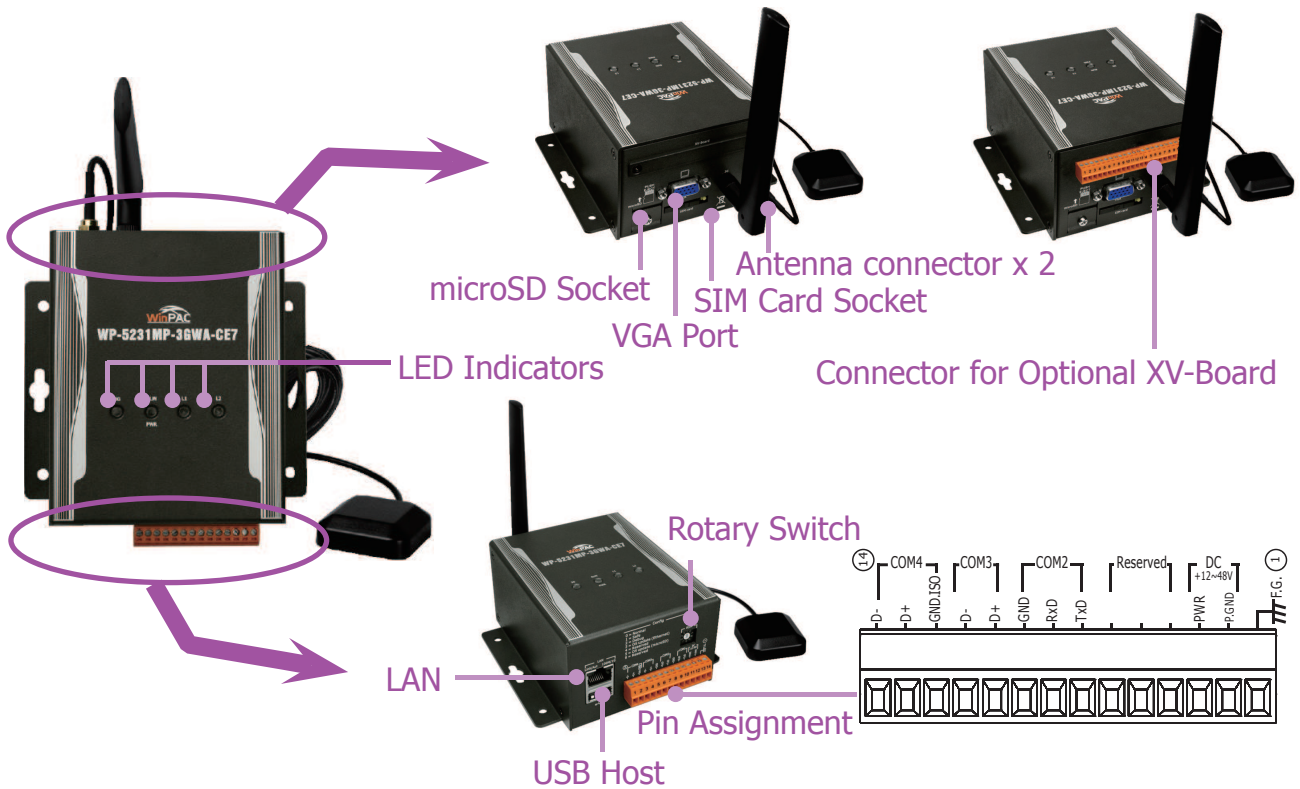
Windows CE 7.0 is a compact and real-time OS used to quickly create time critical and high performance applications. Using Windows CE 7.0 gives an ability to run PC-based control software such as Visual Basic .NET, Virtual C#.

- FTP Server
- Web Server
- SQL Compact Edition 3.5
- .NET Compact Framework 3.5
- Virtual CE Pro (VCEP)
- OPC Server (NAPOPC\_CE5 DA Server)

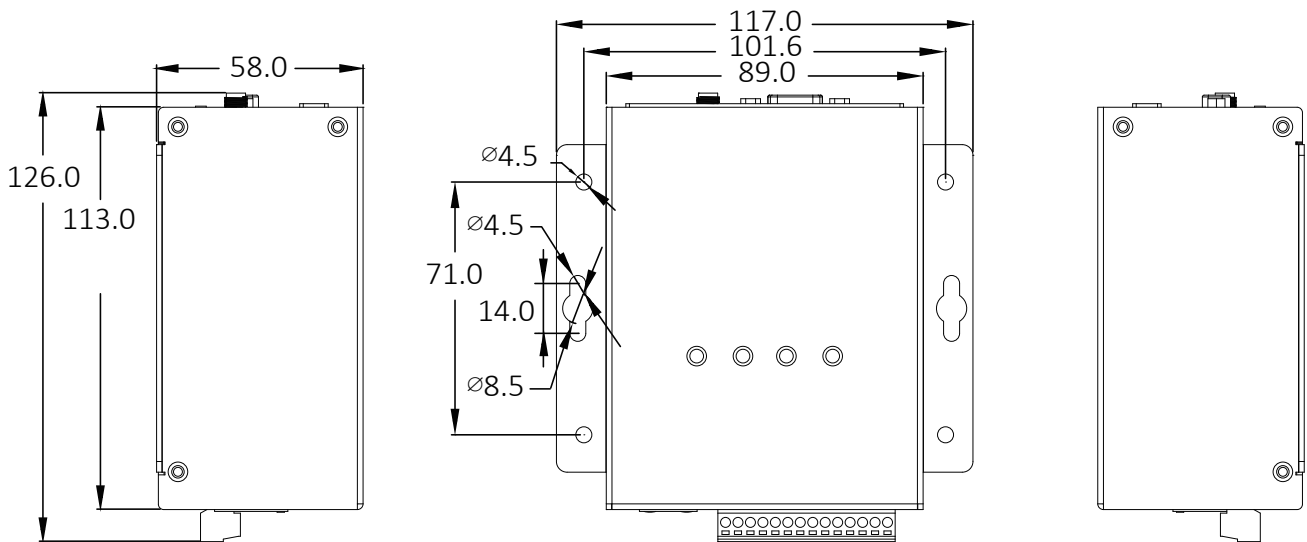
## Specifications

Models	WP-5231PM-3GWA-CE7
<b>System Software</b>	
OS	Windows CE 7.0 Professional
.Net Compact Framework	3.5
Embedded Service	FTP server, Web server
SDK Provided	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, 1GHz
DDR3 SDRAM	256 MB
Flash	256 MB
FRAM	64 KB
Expansion Flash Memory	microSD socket with one microSD card (support up to 32 GB microSDHC card)
RTC (Real Time Clock)	Provide second, minute, hour, date, day of week, month, year
64-bit Hardware Serial Number	Yes, for Software Copy Protection
Dual Watchdog Timers	Yes
LED Indicators	1 LED for Power and Running; 2 LED for user defined
Rotary Switch	Yes (0 to 9)
<b>VGA and Communication Ports</b>	
VGA Resolution	640 × 480, 800 × 480, 800 × 600, 1024 × 768
Ethernet	RJ-45 x 1, 10/100/1000 Based-TX ( Auto-negotiating, Auto MDI/MDI-X, LED indicators)
USB 2.0 (host)	1
COM 1	Console Reserved for OS
COM 2	RS-232 (RxD, TxD and GND); Non-isolated
COM 3	RS-485 (Data+, Data-); Non-isolated
COM 4	RS-485 (Data+, Data-); 2500 VDC isolated
<b>I/O Expansion</b>	
I/O Expansion Bus	Yes, one optional XV-board
<b>Mechanical</b>	
Casing	Metal
Dimensions (W x L x H)	117 mm x 126 mm x 58 mm
Installation	Wall Mounting
<b>Environmental</b>	
Operating Temperature	-25 to +75°C
Storage Temperature	-40 to +80°C
Ambient Relative Humidity	10 to 90% RH (non-condensing)
<b>Power</b>	
Input Range	+12 to +48 VDC
Consumption	6.5 W
<b>GSM System</b>	
Frequency Band	GSM: 850/900/1800/1900 MHz
GPRS Connectivity	GPRS class 12/10; GPRS station class B
Data GPRS	Downlink transfer: Max. 85.6 kbps; Uplink transfer: Max 42.8k bps
<b>3G System</b>	
Frequency Band	WCDMA 850/900/1900/2100 MHz
Data Transmission	WCDMA / HSPA+, Download: Max. 14.4Mbps; Upload: Max 5.76Mbps
<b>GPS System (option)</b>	
Support Channels	32
Protocol Support	NMEA 0183

## Appearance



## Dimension



## Ordering Information

<b>WP-5231PM-3GWA-CE7</b>	PAC with WinCE 7.0 and with GPS Function (RoHS)
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## Option Accessories

<b>XV-Board</b>	Add-on I/O Expansion Board
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