



Features

- Cortex-A8, 1GHz CPU
- Windows CE 7.0 Professional
- 512 MB SDRAM and 256 MB Flash
- 64-bit Hardware Serial Number
- Hard Real-Time Capability
- I/O Expansion Bus
- 10/100/1000M Ethernet Ports
- 2*RS-485 and 1*RS-232
- Operating Temperature: -25 ~ +75°C
- Industrial Tri-band 4G module
- 4G modem



Introduction

The WP-5231PM-4GC-CE7/WP-5231PM-4GE-CE7 is equipped a Cortex-A8 CPU (1GHz) 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-4GE-CE7/WP-5231PM-4GE-CE7 can save application program, image file and data.

The 4G module of WP-5231PM-4GC-CE7 work on frequencies of WCDMA 900/2100 MHz, TD-SCDMA 1900/2100 MHz, CDMA2000 (BC0) 800 MHz, FDD LTE:B1/B3/B8, TDD LTE: B38/B39/B40/B41 and GSM 850/900/1800/1900 MHz. The 4G module of WP-5231PM-4GE-CE7 work on frequencies of WCDMA 2100/1900/900/850 MHz, FDD LTE:B1/B3/B5/B7/B8/B20 and GSM 850/900/1800/1900 MHz. These modules utilize the 4G and 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 and 4G or 3G connection applications with our PAC.

Windows CE 7.0



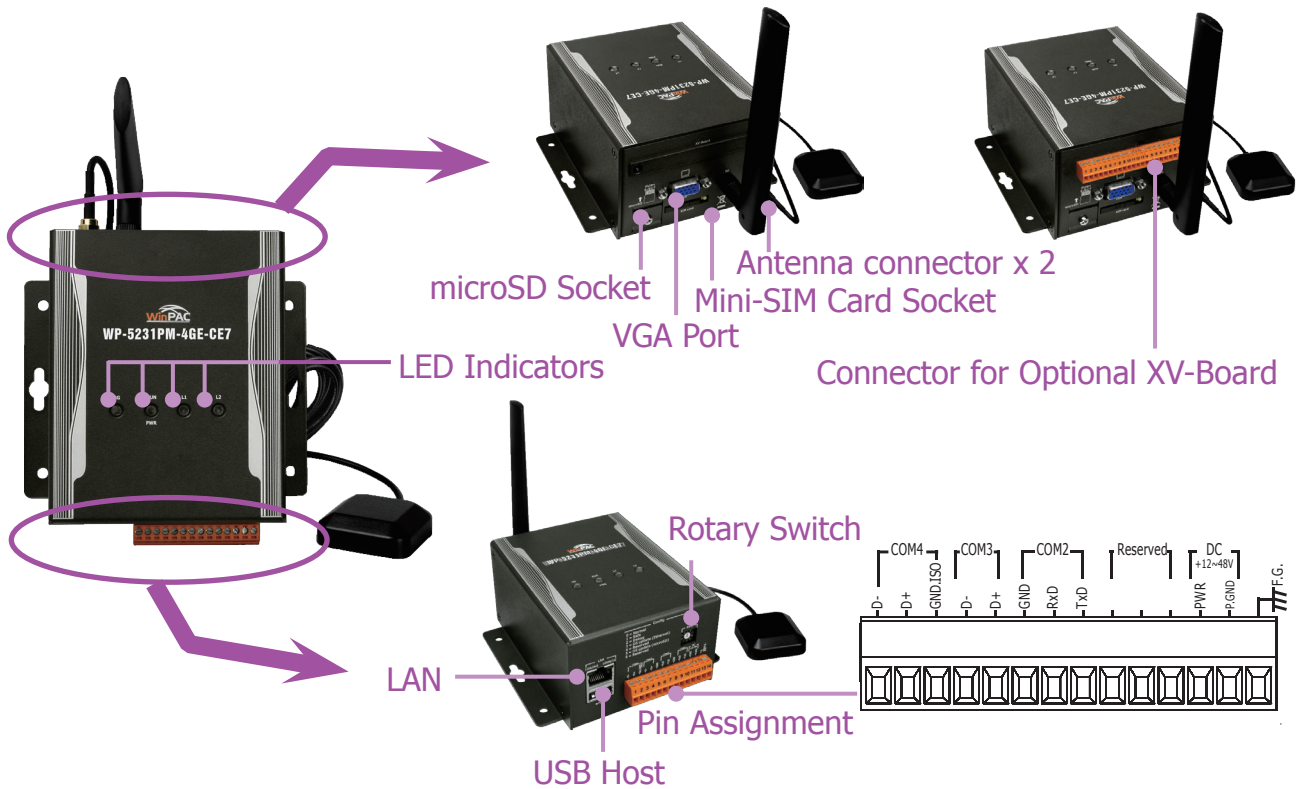
Windows CE 7.0 is a compact and real-time OS used to quickly create time critical and high performance applications. Using Windows CE 7.0 gives an ability to run PC-based control software such as Visual Basic .NET, Virtual C#.

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

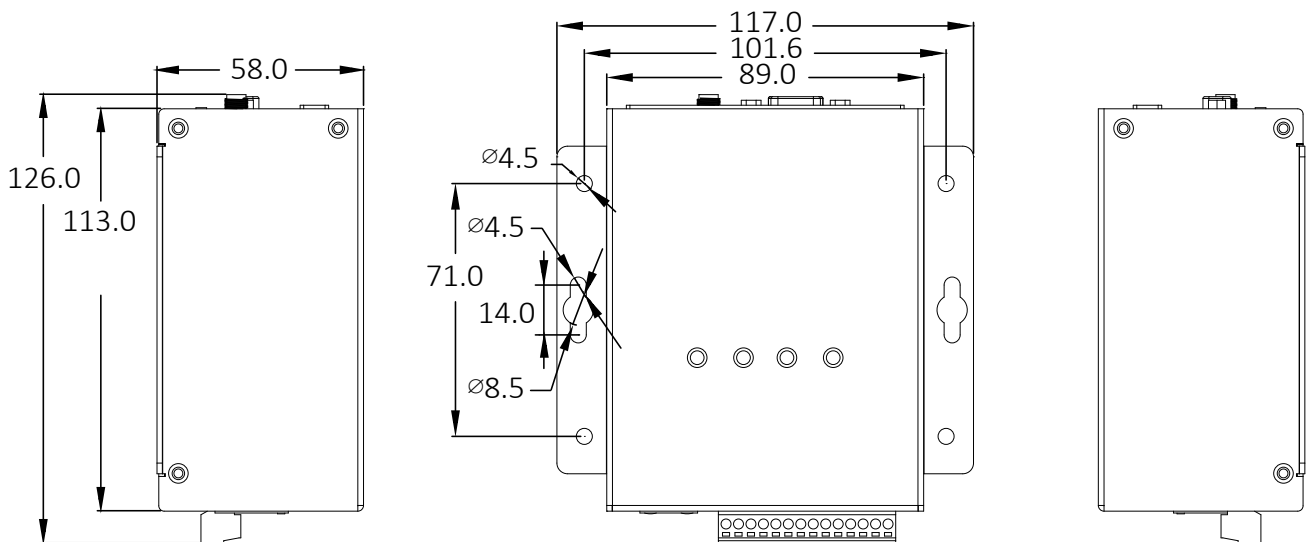
Specifications

Models	WP-5231PM-4GC-CE7	WP-5231PM-4GE-CE7
System Software		
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	
CPU Module		
CPU	Cortex-A8, 1GHz	
DDR3 SDRAM	512 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	
Hardware Serial Number	Yes, 64-bit hardware serial number 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)	
VGA and Communication Ports		
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	
I/O Expansion		
I/O Expansion Bus	Yes, one optional XV-board	
Mechanical		
Casing	Metal	
Dimensions (W x L x H)	117 mm x 126 mm x 58 mm	
Installation	DIN-Rail Mounting/Wall Mounting	
Environmental		
Operating Temperature	-25 to +75°C	
Storage Temperature	-40 to +80°C	
Ambient Relative Humidity	10 to 90% RH (non-condensing)	
Power		
Input Range	+12 to +48 VDC	
Consumption	6.5 W	
GSM System		
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	
3G System		
Frequency Band	WCDMA 900/2100, TD-SCDMA 1900/2100, CDMA2000 (BC0) 800	WCDMA 850/900/2100 MHz
Data Transmission	DC-HSPA+ Download: Max. 42 Mbps; Upload: Max 5.76 Mbps TD-SCDMA Download: Max. 4.2 Mbps; Upload: Max 2.2 Mbps CDMA2000 EVDO Download: Max. 14.7 Mbps; Upload: Max 5.4 Mbps	
4G System		
Frequency Band	FDD LTE: B1/B3/B8, TDD LTE: B38/B39/B40/B41	FDD LTE: B1/B3/B5/B7/B8/B20 MHz
Data Transmission	Download Max 100 Mbps/Upload Max 50 Mbps	
GPS System (option)		
Support Channels	32	
Protocol Support	NMEA 0183	

Appearance



Dimension



Ordering Information

WP-5231PM-4GC-CE7	PAC with WinCE 7.0 and with GPS and 4G Function (Frequency Band for China)
WP-5231PM-4GE-CE7	PAC with WinCE 7.0 and with GPS and 4G Function (Frequency Band for Europe)

Option Accessories

XV-Board	Add-on I/O Expansion Board
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