



## Introduction

The LP-5231 is equipped with a Cortex-A8 CPU (1 GHz) running a Linux operating system (Linux Kernel 3.2.14), a variant of input/output ports (VGA, USB, Ethernet, RS-232/485), and powerful software including development tools. Linux Kernel 3.2.14 is a compact and real-time OS used to quickly create time critical and high performance applications.

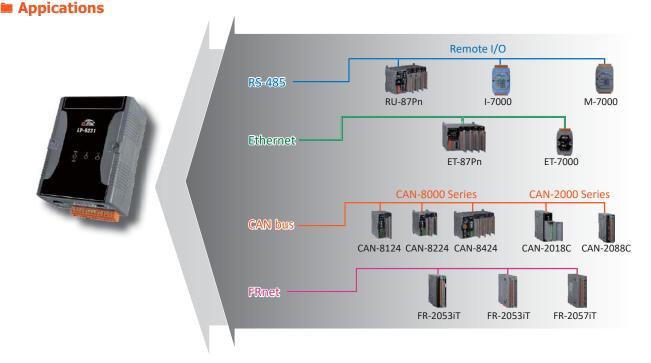
Main advantage of the LP-5231 is its high quality control system, including its stability, small core size, optional I/O expansion board, support for Web services (Web/SFTP/SSH server). Using the built-in Flash and microSD, the LinPAC can save application program, image file and data.

## 🖿 Linux Kernel OS



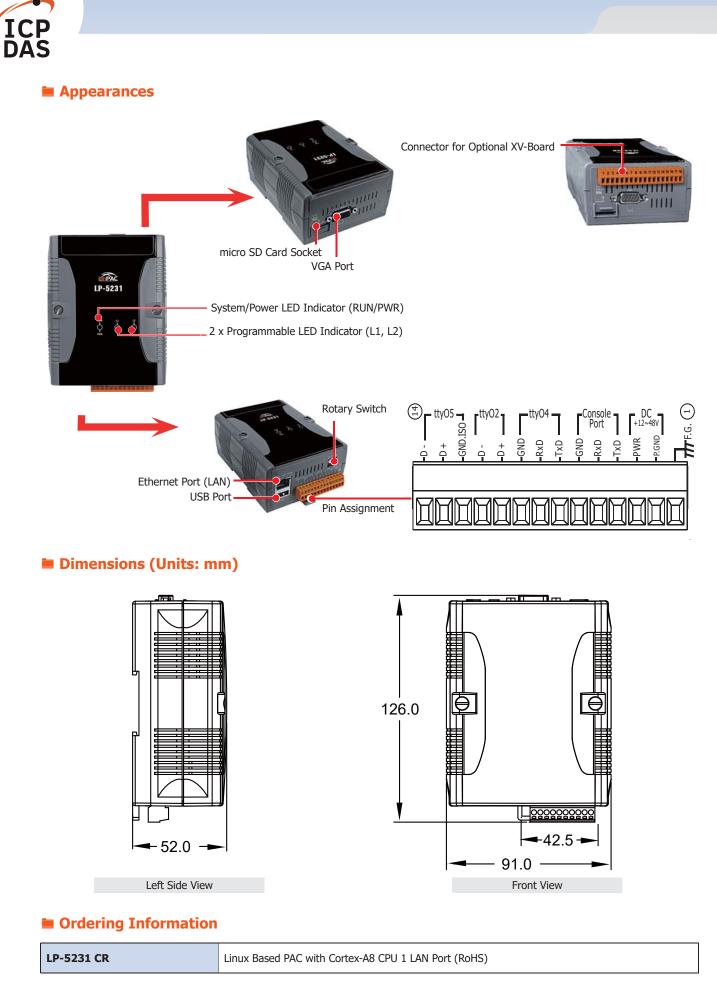
Main advantage of the LP-5231 is its high quality control system, including its stably properties, open source and the standard LinPAC SDK for Windows and Linux using the GNU C language, GUI software. The main purpose of LP-5231 is to allow the numerous enthusiastic Linux users to control their own embedded system easily within the Linux environment.

- LinPAC SDK for Windows and Linux
- Support for GNU C Language
- Support for GUI: Using GTK + Library
- Support for USB to Serial Converter
- Support for DCON, Modbus and SNMP Protocols



## **Specifications**

Model	LP-5231
System Software	
OS	Linux Kernel 3.2.14
Service	SFTP server, Web server, SSH
SDK	LinPAC SDK (GCC based toolchain and LinPAC Libraries)
CPU Module	
CPU	Cortex-A8, 1.0 GHz
System Memory	512 MB DDR3 SDRAM
Flash	512 MB
FRAM	64 KB
Storage	4 GB microSD card (up to 32 GB)
RTC (Real Time Clock)	Provide seconds, minutes, hours, dates, day of week, month, year
64-bit Hardware Serial Number	Yes, for software copy protection
Watchdog Timer	Dual Watchdog Timer
Rotary Switch	1 x 10 Position (0 ~ 9)
Buzzer	Yes
Display	
VGA	1 (max. resolution up to 1280 x 1024)
LED Indicator	4 (Power, Running and 2 user defined LEDs)
Communication Ports	
Ethernet	1 x RJ-45, 10/100/1000 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)
USB 2.0 (host)	1
Console Port	RS-232 (RxD, TxD and GND); Non-isolated
ttyO2	RS-485 (Data+, Data-); Non-isolated
ttyO4	RS-232 (RxD, TxD and GND); Non-isolated
ttyO5	RS-485 (Data+, Data-); 2500 VDC isolated
I/O Expansion	
I/O Expansion Bus	One optional XV-board
Mechanical	
Casing	Plastic
Dimensions (W x L x H)	91 mm x 132 mm x 52 mm
Installation	DIN-Rail, Wall mounting
Environmental	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +80 °C
Humidity	10 ~ 90 % RH, Non-condensing
Power	
Input Range	+12 ~ 48 VDC
Consumption	4.8 W



## Accessories

XV-Board	Add-on I/O Expansion Board	