

Features

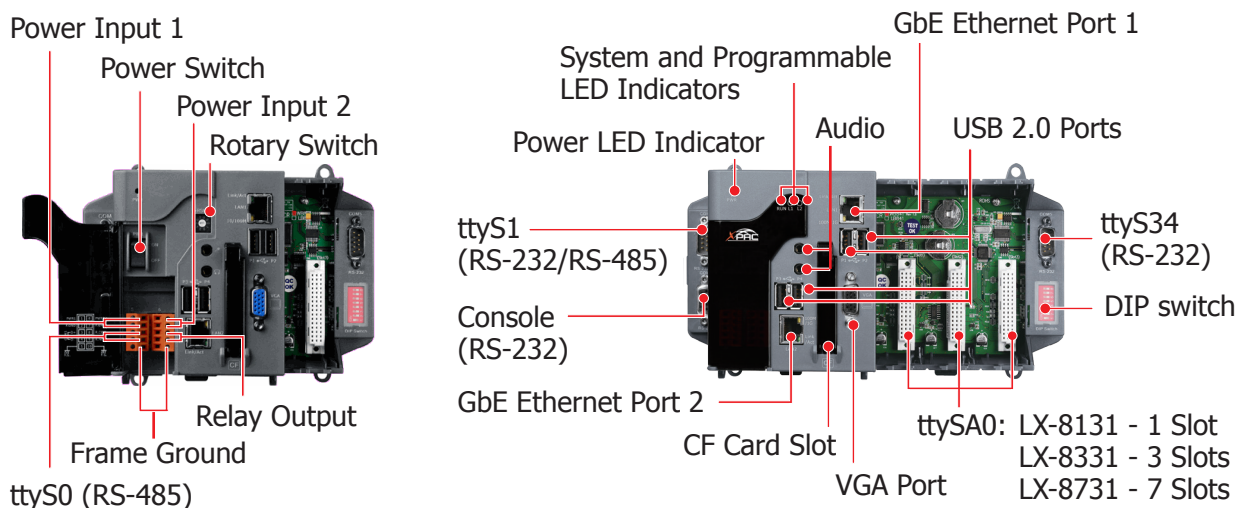
- x86 CPU, 1 GHz, dual-core
- Linux Kernel 3.2
- Hard Real-Time Capability
- Embedded Service: Web Server, FTP Server, Telnet Server, SSH Server
- Rich I/O Expansion Ability (RS-232/RS-485)
- VGA Port Output
- Redundant Power Inputs
- Operating Temperature: -25 ~ +75°C

Introduction

The LX-8x31 are Linux based PACs 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 x86 CPU, 1/3/7 I/O expansion slots and a variety of connectives including dual Gigabit Ethernet, VGA, USB port, RS-232 and RS-485 interface. Local I/O slots are available to use our I-8K and I-87K series I/O modules and remote I/O expansions are available to use our Ethernet I/O modules and RS-485 I/O modules.

User's programs can be saved in external storage device, such as CF Card or USB mass storage device. LinPAC SDK is provided for users to develop LinPAC I/O applications rapidly and easily when I-7000/8000/87k series I/O modules are used in the LinPAC. Users can develop LinPAC applications by using GNU C Language. In the meanwhile, all kinds of servers and functions built-in make the LinPAC more powerful and users will be able to operate LinPAC to achieve their own project smoothly.

Appearance

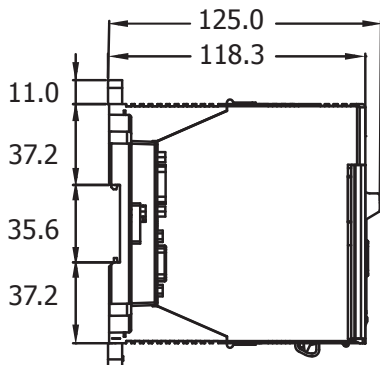


■ Specifications

Models	LX-8131	LX-8331	LX-8731
System Software			
OS	Linux kernel 3.2		
Embedded Service	SFTP server, Web server, SSH		
SDK Provided	LinPAC SDK (GCC based toolchain and LinPAC Libraries)		
CPU Module			
CPU	x86 CPU, 1 GHz, dual-core		
System Memory	2 GB DDR3		
MRAM	512 KB; data valid up to 5 years		
Flash	mSATA slot with one 32 GB SSD		
EEPROM	16 KB		
CF Card	16 GB (support up to 32 GB)		
RTC (Real Time Clock)	Provide second, minute, hour, date, day of week, month, year		
Hardware Serial Number	Yes, 64-bits for Software Copy Protection		
Dual Watchdog Timers	Yes		
LED Indicators	3 Programmable LED indicators (RUN, L1 and L2)		
Rotary Switch	Yes (0 to 9)		
DIP Switch	Yes (8 bits)		
Audio	Microphone-In and Earphone-Out		
VGA & Communication Ports			
VGA	1280 x 1024 to 1920 x 1080 for 16:9 display; 640 x 480 to 1024 x 768 for 4:3 display		
Ethernet (Giga bit)	RJ-45 x 2, 10/100/1000 Base-T (Auto-negotiating, Auto MDI/MDI-X, LED indicators)		
USB 2.0	4		
ttySA0	Internal communication with the high profile I-87K series modules in slots		
ttyS0	RS-485 (Data+, Data-); 3000 Vdc isolated		
ttyS1	RS-232/485 (RxD, TxD and GND for RS-232; Data+, Data- for RS-485); 3000 Vdc isolated		
Console	RS-232 (RxD, TxD, CTS, RTS and GND for RS-232); 3000 Vdc isolated		
ttyS34	RS-232 (RxD, TxD, CTS, RTS, DSR, DTR, CD, RI and GND); 3000 Vdc isolated		
I/O Expansion Slots			
Slot Number	1	3	7
Mechanical			
Dimensions (W x L x H)	169 x 132 x 125 mm	231 x 132 x 125 mm	355 x 132 x 125 mm
Installation	DIN-Rail or Wall Mounting		
Environmental			
Operating Temperature	-25 to +75°C		
Storage Temperature	-30 to +80°C		
Ambient Relative Humidity	10 to 90 % RH, non-condensing		
Power			
Input Range	+10 to +30 Vdc		
Isolation	1 kV		
Redundant Power Inputs	Yes, with one power relay (1 A @ 24 Vdc) for alarm		
Capacity	2.5 A, 5 V supply to CPU and backplane, 1.5 A, 5 V supply to I/O expansion slots, 20 W in total	2.8 A, 5 V supply to CPU and backplane, 4.2 A, 5 V supply to I/O expansion slots, 35 W in total	3 A, 5 V supply to CPU and backplane, 4 A, 5 V supply to I/O expansion slots, 35 W in total
Consumption	14.4 W (0.6 A @ 24 VDC)	15.6 W (0.65 A @ 24 VDC)	16.8 W (0.7 A @ 24 VDC)

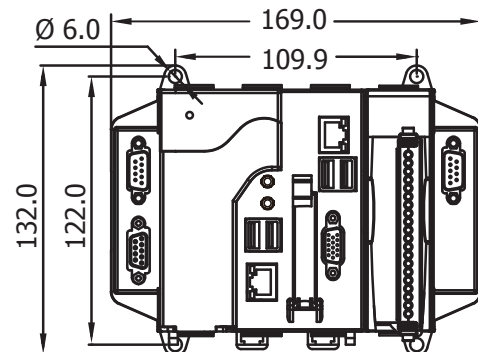
Dimensions

Side View



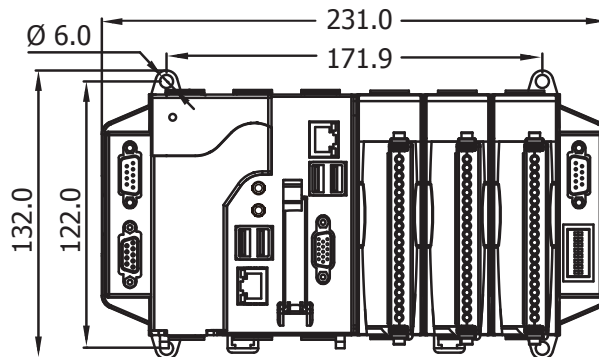
Front View

LX-8131



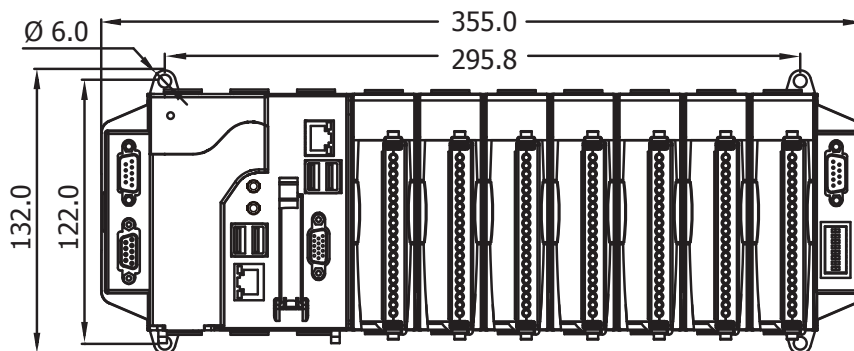
Front View

LX-8331



Front View

LX-8731



Ordering Information

LX-8131	Standard PAC with x86 CPU, Linux OS and 1 I/O Slot
LX-8331	Standard PAC with x86 CPU, Linux OS and 3 I/O Slots
LX-8731	Standard PAC with x86 CPU, Linux OS and 7 I/O Slots