

# JetBox 8210

## Industrial RISC Communication Computer



CE FC  RoHS

- **High performance with low power consumption:**
  1. Intel XScale PXA270 RISC 416MHz,
  2. System memory 128MB, 8MB VGA
- **Plentiful interfaces:**

Dual Ethernet, 16 DI/16DO, 4 COM, 4 USB, VGA, Audio
- **Reliable robust form factor:**
  1. 5g Anti-vibration and 50g shock resistant
  2. Operating Temperature:-15~70°C, Fanless
- **Ready to use:**
  1. Embedded Linux/Win CE OS ready
  2. System Management Utility
  3. Application Development Environment
  4. Modbus gateway (optional)



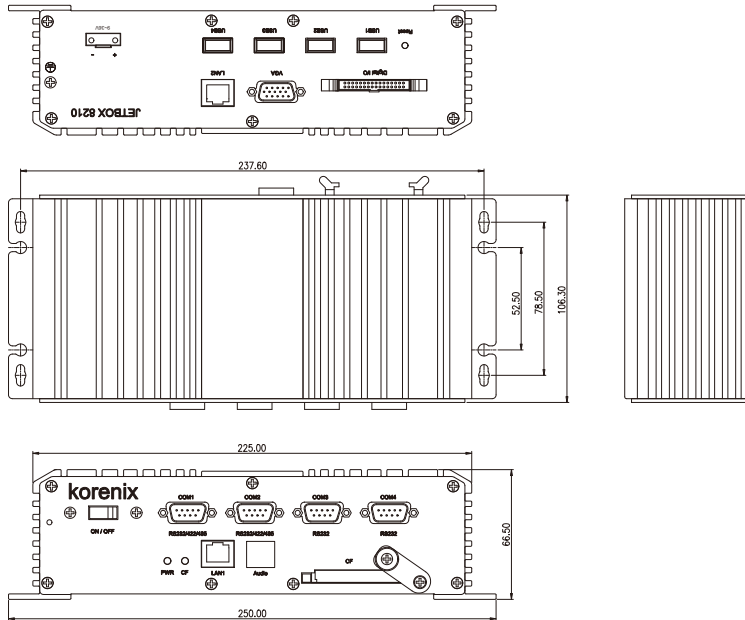
### Overview

The advantage of adopting Korenix JetBox series is that it is ready-to-use out of the box. Korenix is devoted to improving the usability of embedded computers in the industrial domain. Along with the operating system (Linux/ WinCE), Korenix provides device drivers, protocol stacks, system utilities, supporting services and daemons in one CompactFlash card to make system integration simple. Further, Korenix provides application development toolkits for users to build up their own applications easily.

JetBox 8210 is a high performance, compact and rugged embedded computer. All-in-one device with small volume, fanless design and a capability to withstand a wide range of temperatures it is suitable for industrial harsh environments. It is equipped with

Intel Xscale PXA270 RISC 416MHz processor and 128MB SDRAM and that supports Linux and WinCE 5.0 to meet requirements of industrial PC applications. For better scalability, it features four USB ports, two RS-232 ports and two RS-232/422/485 ports for versatile peripheral and interfaces and one CompactFlash slot for system integration. It also supports VGA and audio output to give users flexibility in industrial applications. In addition, it is equipped with two RJ-45 ports and supports daemons and web server services making it ideal for today industrial networking environments. With complete SW solution and excellent HW design, JetBox series is the best choice of embedded computer.

## Dimensions (Unit = mm)



Industrial  
PoE Switch

IP67/68  
Ethernet Switch

Rackmount  
Managed  
Switch

Gigabit Switch

Redundant  
Switch

Entry-Level  
Switch

Networking  
Computer

Communication  
Computer

Ethernet  
I/O Server

Serial Device  
Server

Media  
Converter

Multiport  
Serial Card

SFP Module

Din Rail  
Power Supply

## Hardware Specifications

### System

**Processor:** Intel XScale PXA270 RISC 416MHz

**System Memory:** SDRAM 128MB

**VGA:** 8MB, DB-15 connector

**Ethernet:** 10/100 Based-TX RJ-45 connector x 2,  
Built-in 15 KV ESD protection for all signals

**SSD:** Type II CompactFlash slot x 1

**Serial Port:** RS-232x2, RS-232/422/485x2

**Audio:** AC97, mini-DIN connector x 1

**USB:** USB 1.1 x 4

**Digital I/O:** 16 in & 16 out Digital IO

**System Control:** Power on/off switch x1, Reset button x1

**HW Watchdog Timer:** Generates a time-out system reset,  
1.6 sec

**Power Supply:**

DC input: 9~36V DC

**OS support:** Windows CE 5.0, Embedded Linux 2.6.18

### Mechanical

**Construction:** Rugged Aluminum Alloy Chassis

**Color:** Silver

**Mounting:** Wallmount (Default), DIN Rail

**Dimension:** 250(W) x 66.5(H) x 106.3(D) mm

**Net weight:** 1.07 kg

### Environment

**Operating Temp:** 5°F ~ 158°F (-15°C ~ 70°C), 5 ~ 95% RH

**Storage Temp:** -4°F ~ 176°F (-20°C ~ 80°C), 5 ~ 95% RH

**Anti-Vibration:** IEC60068-2-6 5g / 10 ~ 150Hz / operating

**Anti-Shock:** IEC60068-2-27 / 50g peak acceleration

**Regulation:** CE/FCC class A

**Warranty:** 5 years

## Software Specifications

**Embedded Linux:** Linux Kernel 2.6.18

**Protocol Stack:** TCP, UDP, IPv4, SNMP, ICMP, IGMP, ARP, HTTP, CHAP, PAP, SSH 1.0/ 2.0, SSL, DHCP, NTP, NFS, SMTP, Telnet, FTP, PPP, PPPoE

**System Utilities:** bash, busybox, tinylogin, telnet, ftp,

**Supporting Services and Daemons:**

telnetd: Telnet Server daemon

ftpd: FTP server daemon

sshd: Secure shell server

Apache: Web server daemon, supports PHP and XML

MySQL: Database Server and Client

OpenVPN: Virtual private network service manager

iptables: Firewall service manager

pppd: dial in/out over serial port daemon

snmpd: snmpd agent daemon

inetd: TCP server manager program

**Application Development Environment:**

Korenix Linux API Library

Linux Tool Chain: Gcc, Glibc

**Device Drivers:** CF Card, USB, Watchdog Timer, UART, VGA, Audio

**Windows CE 5.0**

**Protocol Stack:** TCP, UDP, IPv4, SNMP, ICMP, IGMP, ARP, HTTP, CHAP, PAP, SSL, DHCP, SNTP, SMTP\*, Telnet, FTP, PPP

**System Utilities:** Windows command shell, telnet, ftp, web-based administration manager

**Supporting Services and Daemons:**

Telnet Server: Allows remote administration through a standard telnet client

FTP Server: Used for transferring files to and from remote computer systems via a network.

Web Server (httpd): WinCE IIS, offer ASP, ISAPI Secure Socket Layer support, SSL 2, SSL 3, and Transport Layer Security (TLS/SSL 3.1) public key-based protocols, and Web Administration ISAPI Extensions.

Dial-up Networking Service: RAS client API and PPP, support Extensible Authentication Protocol (EAP) and RAS scripting

**Application Development Environment:**

WinCE 5.0 SDK

C Libraries and Run-times

Component Services (COM and DCOM)

Microsoft Foundation Classes (MFC)

Microsoft® .NET Compact Framework

XML, including DOM, XQL, XPATH, XSLT, SAX2

SOAP Toolkit

Winsock 2.2

**Device Drivers:** CF Card, USB, Watchdog Timer, UART, VGA, Audio

\*Supported by WinCE professional

## Ordering Information

**JetBox 8210 Intel PXA270 416MHz,9~36VDC,128MB SDRAM**

Includes:

- JetBox 8210 Intel PXA270 416MHz industrial communication computer
- Quick installation guide
- Documentation and software CD-ROM

## Optional Accessories

- System on CompactFlash: CompactFlash card capacity is 2G

Part number: CF2G-x		L	LM	CC	CP	CCM	CPM
Linux		•	•				
WinCE	Core			•		•	
	Professional				•		•
Modbus, gateway			•			•	•
System management utility		•	•	•	•	•	•

Ex: Part number CF2G-CCM is CF card (capacity 2G) with WinCE Core version OS and Modbus gateway.