

JetBox 3350i-w

Embedded Compact 2 LAN & 2 Isolated Serial Linux Computer



CE FC RoHS



- Atmel ARM Processor with low power consumption for reliable performance
- Embedded Linux ready compact system for easy maintenance
- Linux SDK for quick time-to-market
- 2 LAN ports for Daisy-Chain Controller
- 2 USB for data storage
- 2KV Serial Isolation for device protection
- One microSD card slot for customized configurations
- Fan-less, ruggedized industrial design for anti-vibration/shock and -40~80°C wide operating temperature



Overview

JetBox 3350i-w is a compact-sized embedded Linux computer with low power consumption, designed to fit in small front-end controller system applications. Versatile interfaces, including Ethernet, USB and isolated Serial ports are integrated in a tiny box to fit in a small system with different operational requirements - from networking, to data storage, to signal control.

The computers are designed with IP31 rugged enclosure, fan-less, anti-vibration/shock design. Moreover, to withstand the unfavorable environmental conditions, the RISC-based computers with low power consumption come with 2KV isolated serial ports and -40~80°C wide operating temperature, and therefore are the best solutions for deploying in harsh industrial environments.

Embedded Linux Ready

Korenix is devoted to the Linux computing and benefits customers by providing the JetBox series with embedded Linux ready system and easy-to-use interface. Compared to general purpose Linux system, embedded Linux is performance-optimized for front-end industrial control.

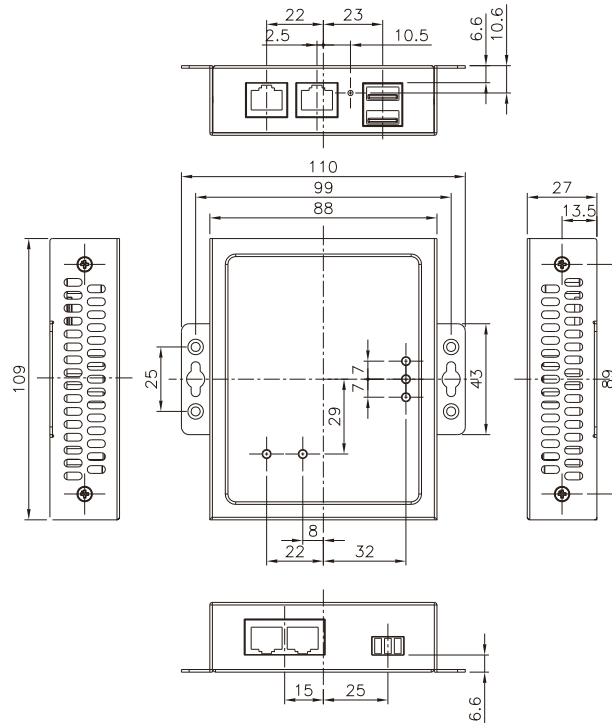
RISC-Based Computer with low power consumption

The JetBox 3350-i is a RISC-based computer with lower power consumption and is stable and reliable. The JetBox 3350-i carries 2 LAN ports, 2 USB ports and 2 Serial ports to be the best solution in industrial control.

Isolated Serial Port

The JetBox 3350-i provides 2KV isolation protection for two RS232/422/485 ports; therefore it is suitable to adapt to the critical industrial environments.

Dimensions (Unit = mm)



- Industrial Intelligent NMS
- Rackmount PoE Plus Switch
- Industrial PoE Plus Switch
- Industrial 12-24V PoE Switch
- Industrial PoE Switch
- Rackmount L3/L2 Switch
- Gigabit Managed Switch
- Managed Ethernet Switch
- Entry-level Switch
- Wireless Outdoor AP
- Embedded PoE/Router Computer (LINUX)**
- Industrial Communication Computer (WIN/LINUX)
- Ethernet/PoE/Serial Board
- Ethernet I/O Server
- Media Converter
- Serial Device Server
- SFP Module
- Din Rail Power Supply

Hardware Specifications

System

Processor:

Atmel ARM AT91RM9200 180 MHz

System memory: 64MB SDRAM

System flash: 16MB ROM

Ethernet: 10/100 Based-Tx RJ-45 connector x2

Storage:

microSD card slot x1

Serial port: RS232/422/485 x2 (RJ45 connector) with 2KV isolation protection

USB: USB 2.0 full speed x2 (Host)

Supporting devices: USB flash, wireless dongle

LED on Ethernet port:

Link/ Activity (Green on/ blinking)

Fdx/Col status (Yellow on/ blinking)

LED per unit:

Power on/off x1 (Green on/off)

Ethernet Link/ Activity (Green on/ Green blinking) x2

Serial Tx only (Green), Rx only (Red), Both (Orange) x2

Reset button x1

HW Watchdog timer:

Generates a time-out system reset, 1sec

Power Supply: DC 12~48V

Power Consumption: 7.2W

OS support: Embedded Linux 2.6.21

Mechanical

Construction: Sheet metal case

Color: Silver

Mounting: Wall mount/DIN rail

Dimension: 109(H) x 88(W) x 27(D) mm

Net weight: 0.5kg

Environment

Operating Temp:

-40 ~ 176°F (-40 ~ 80°C), 5 to 95% RH

Storage Temp: -40 ~ 176°C (-40 ~ 80°C), 5 to 95% RH

Regulation: FCC class A, CE

EN55022 class A, EN55024, EN61000-3-2, 3

EN61000-4-2, 3, 4, 5, 6, 8, 11

Shock: IEC60068-2-27 (50g peak acceleration)

Vibration: IEC60068-2-6 (5g/10~150Hz/operating)

MTBF: Greater than 200,000 hours@25°C

Warranty: 5 years



Linux Specifications

Embedded Linux (JetOS93 lite)

Bootloader: JetBox bootloader

Linux Kernel: 2.6.21

Shell: GNU ash

File system: jffs2, NFS, Ext2, Ext3, VFAT, FAT

Device drivers: microSD card, USB, Watchdog timer, UART, Ethernet

Protocol: ARP, PPP, CHAP, IPv4, PAP, ICMP, TCP, UDP, NFS

Software packages: busybox (telnetd, inetd, udhcp, syslogd), diocfg, Irzsz, minicom, microcom, , ncurses, ser2net, setserial, bridge-utils, ethtool, goahead web server, iptables, net-snmp, ntp, openssh, openssl, pppd, ftpd, rp-pppoe, smtpclient, wireless-tools

Korenix Linux auto-run function

Customized configuration

Process monitoring

Serial Interface

Serial service modes: TCP server

LAN Interface

Ethernet: 10/100 Based-Tx RJ-45 connector x2, auto MDI/MDI-X

Management & Security

Security HTTPS, SSH

SNMP: MIB and traps

NTP for time management

SDK

Linux tool chain: Gcc (C/C++ PC cross compiler), uClibc, libstdc++

Linux sample code

Ordering Information

JetBox 3350-iw Embedded Compact 2 LAN & 2 Isolated Serial Linux Computer

Includes:

- JetBox 3350-iw
- Serial cable (RJ45 to DB9 male, 150cm) x2
- Attached 3-pin power terminal block
- DIN rail kits
- Quick installation guide
- Documentation and software CD-ROM

Optional Accessories

- Additional applications on micro-SD card: micro-SD card capacity is 1G/2G
 - mSD1G-LM mSD 1G, Modbus gateway for Linux
 - mSD2G-LM mSD 2G, Modbus gateway for Linux