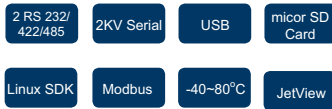# JETBOX

JetBox 3350i-w

Embedded Compact 2 LAN & 2 Isolated Serial Linux Computer

- 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

CE FC RoHS

| 2 RS 232/ 422/485 | 2KV Serial | USB | micor SD Card |
| Linux SDK | Modbus | -40~80°C | JetView |

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.
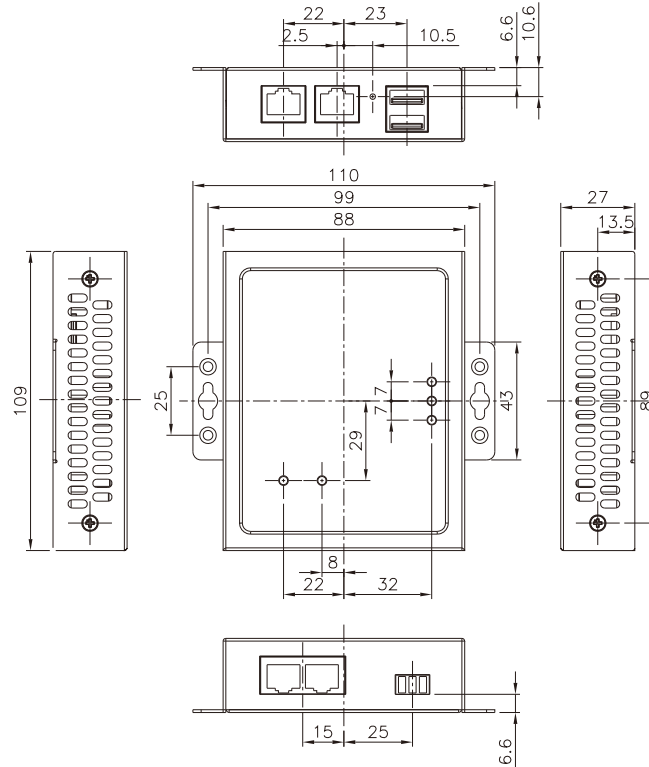
Embedded Linux Ready

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.

JetBox 3350i-w support JetView management tool for device discovery, IP modification and firmware upgrade; which enable customers to manage JetBox devices easily. Also, JetBox 3350i-w support ModbusGW, Modbus2SNMP to be the best solution in industrial device control.

Isolated Serial Port

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

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Dimensions (Unit = mm)

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/ system ready x1 (Green on/ Green blinking)
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

JETBOX

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, Bluetooth
Protocol: ARP, PPP, CHAP, IPv4, PAP, ICMP, TCP, UDP, NFS SNMP v1/v2c/v3, NTP, SSH1.0/2.0, SSL, OpenVPN, PPP, PPPoE, SMTP, 802.11, telnet, dhcp, L2CAP, RFCOMM, BNEP
Software packages: busybox (telnetd, inetd, udhcp, syslogd), diocfg, lrzsz, minicom, microcom, , ncurses, ser2net, setserial, bridge-utils, ethtool, goahead web server, iptables, net-snmp, ntp, openssh, openssl, pppd, ftpd, rp-pppoe, wireless-tools, wvdial, openvpn, msmtp, bluez-utils, obexftp
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
JetView: Device Discovery, Change IP, Firmware Upgrade

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 2G/4G

  mSD2G-LM mSD 2G, Modbus gateway for Linux

  mSD2G-LM2S mSD 2G, Modbus2SNMP for Linux

  mSD4G-LM mSD 4G, Modbus gateway for Linux

  mSD4G-LM2S mSD 4G, Modbus2SNMP for Linux