

JetBox 9463G-w

Embedded 4-Port GbE VPN Routing Computer, w/ miniPCle & SIM slot



- Intel IXP 435 667MHz networking processor
- VPN, DMVPN for enhanced secure networking
- Complete layer3 routing: OSPF, RIP, DVMRP, IPv6
- 4-port Gigabit Ethernet for high-bandwidth data transmission
- miniPCle & SIM slot for mobile module (GSM/GPRS/3G/HSUPA)
- Versatile interfaces of USB, DIO, SD control
- Full managed features with QoS, VLAN
- NTP for network time management
- Embedded Linux UI—Modulized Webmin, capable of running customized control programs
- Linux Auto-run SD card for customized configuration
- Cross-platform applications by JamVM
- DC 12~48V power input
- Fan-less and ruggedized industrial design for anti-vibration, anti-shock,
- -40~80°C operating temperature



Overview

JetBox 9463G is a robust Embedded gigabit router computer, equipped with 4 Gigabit Ethernet ports to provide high-bandwidth network connections in industrial environments. With complete Layer3 routing and VPN functionalities, the device is capable of expanding networking capabilities and reducing system costs by effectively managing dynamic long distance and secure network groups.

Combined with IP31 rugged fan-less design, including vibration/shock resistance and -40~80°C wide operating temperature, JetBox 9463G-w ensures the reliability and high performance of large network infrastructures in severe industrial environments.

Mobile network

(GSM/GPRS/3G/3.5G/HSUPA, optional)

The reserved mobile network card slot can extend the network communication via GSM/GPRS/3G/3.5G/

HSUPA and enhance the mobility of the JetBox 9463G.

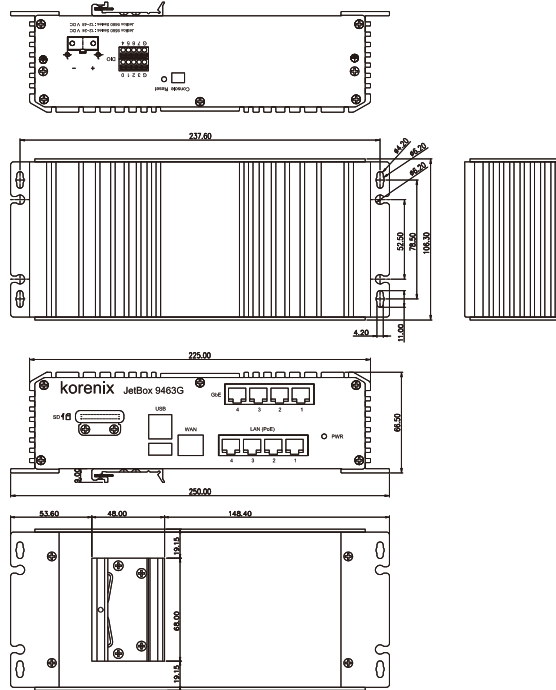
GPS (optional)

GPS is another function which can be provided through the mobile network card for the geographic positioning service. It can deliver the vehicle position data through an unlimited networking and suitable to be used in fleet management.

VPN (Virtual Private Network)

Computer networks are no longer closed systems and may consist of intranets, extranets, and Internet sites. The key remote access requirement of an enterprise organization can be provided using VPN to mitigate the risks of malicious intrusion and establish a mechanism of users' identity. DMVPN (Dynamic Multipoint Virtual Private Network) is an enhancement of VPN and an effective solution for dynamic secure overlay networks.

Dimensions (Unit = mm)



Hardware Specifications

System

Processor:

Intel Xscale IXP435 667MHz RISC-based

Fanless

System memory: 128MB DDR2 RAM

System flash: 32MB

Ethernet:

10/100/1000 Base-Tx RJ-45 connector x4

10/100 Base-Tx RJ-45 connector x5

Network cables for Ethernet:

10Base-T: 2-pair UTP/STP Cat.3,4,5, 100ohm (100m)

100Base-Tx: 2-pair UTP/STP Cat.5, 100ohm (100m)

1000Base-T: 4-pair UTP/STP Cat.5, 100ohm (100m)

Storage:

SD card slot x1

CF card slot x1

Mobile slot:

miniPCIe card slot x1

SIM card slot x1

USB: USB 2.0 x3 (Host)

Supporting devices: USB flash, wireless dongle

Digital IO: 8 DIO (default 8 DI), DI or DO is defined by customers

Console port: 3-pin header (RS232 interface)

LED per unit:

Power on/ off (Green on/ off) x1

LED on Ethernet port:

Link/ Activity (Green on/ blinking)

Fdx/Col status (Yellow on/ blinking)

Gigabit copper: Link/ Activity (Green on/ blinking)

Gigabit copper: Speed 1000M/ other (Yellow on/ off)

Reset button x1

HW Watchdog timer:

Generates a time-out system reset, 1sec

Power Supply: DC 12~24V

Power Consumption: 25W*

OS support: Embedded Linux 2.6.20

Mechanical

Construction: Rugged Aluminum Alloy Chassis, IP31 protection

Color: Silver

Mounting: Wall mount

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

Net weight: 1.07kg

Environment

Operating Temp:

-40 ~ 176°F(-40 ~ 80°C), 5 to 95% RH

Storage Temp: -40 ~ 176°F(-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 20,000 hrs@25°C

Warranty: 5 years

*Specifications may change without prior notice

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



Feature Specifications

WAN Interface

Ethernet: 10/100 Base-Tx RJ-45 connector x1, auto MDI/MDI-X

LAN Interface

Gigabit Ethernet: 10/100/1000 Base-Tx RJ-45 x4

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

Routing per VLAN: Support port-based VLAN and IEEE802.1Q VLAN

Quality of Service: Four priority queues per port, 802.1p COS and IP Layer TOS/DiffServ

Ethernet Performance

Switch Technology: Store and forward technology with 32Gbps switch fabric

Transfer Rate: 14,880 pps for Ethernet port, 148,800 pps for fast Ethernet port, and 1,488,100 pps for Gigabit Ethernet

Transfer Packet Size:

Up to 10K byte Jumbo frames for GbE port

64 bytes to 1522 bytes (with VLAN tag) for LAN port

MAC address: 1K MAC address table

Memory Buffer:

1 Mbits for GbE port

512 Kbits for LAN port

IP Routing Service

Static routing

Dynamic routing: RIP, RIP-II, OSPF, ISIS*, BGP*, DVMRP

PPP

PPPoE

IP Firewall/ Perimeter Security

IP address and port filtering

NAT/ DMZ

VPN: L2TP, PPTP, SLIP, VLAN, IPsec, OpenVPN, GRE*,

NHRP*, DMVPN*

Management & Security

Security

HTTPS, SSH, SFTP

WebUI Webmin (optional)

Linux shell access via TELNET connection or console port

SNMP v1, v2c, v3: MIB and traps

MIB-II, Bridge MIB, Ethernet-like MIB, VLAN MIB

Proprietary SNMP MIB sample code

NTP for time management

Technology

Standard:

IEEE802.3 10Base-T Ethernet

IEEE802.3u 100Base-Tx Fast Ethernet

IEEE802.3ab 1000Base-TX

IEEE802.3x Flow Control and Back-pressure

IEEE802.1p Class of service

IEEE802.1Q VLAN

Processing: Store and Forward architecture

Packet filter: Broadcast packet filtering

*Specifications may change without prior notice

Linux Specifications

Embedded Linux

Bootloader: JetBox bootloader

Linux Kernel: 2.6.20

Shell: GNU ash

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

Device drivers: USB, Watchdog timer, UART, Ethernet, DIO, PoE, SD/mSD card, CF card, HW IPsec VPN, HW Open VPN, JetCard1608/ 2105/ 2154G, VGA*, Mobile dongle*, GPS dongle*

Protocols: ARP, PPP, CHAP, IPv4, IPv6, PAP, ICMP, TCP, UDP, NFS, SNMP v1/v2c/v3, NTP, SSH1.0/2.0, SSL, OpenVPN, Ipsec, PPP, PPPoE, PPTP, FTP, HTTP, SMTP, DNS, L2TP, DVMRP, OSPF, RIP v1.0/2.0, BGP*, ISIS*, VRRP*, 802.11*, HSDPA*, GPRS* telnet, dhcp, VLAN

SW package: Busybox (telnetd, inetd, udhcp, syslogd), e2fsprogs, firmware, i2c-tools, microcom, mtd, netcat, pciutils, ser2net, setserial, ssdutil, usbmount, usbutils, version, bridge-utils, ethtool, iptables, net-snmp, ntp, openssh, openssl, openvpn, openswan, pppd, rp-pppoe,

pptp-linux, proftpd, samba, goahead, mutt, bind, l2tp, mROUTED, quagga, vrrpd, wireless-tools, wvdial

WebUI (optional) includes:

Webmin by Korenix: DIO, PoE, Device Server (TCP Server mode), DHCP, DMVPN, DVMRP, Firmware Upgrade, GPRS, Modbus Gateway*, Module Upgrade, OSPF, RIP, Switch Port, VLAN

Webmin basic

Webmin system

Webmin servers

Webmin others

JavaVM (optional)

Korenix Linux auto-run function

Customized configuration

Process monitoring

SDK

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

Linux sample code

Note: Software supports differ from HW functions of each model

Ordering Information

JetBox 9463G-w Embedded 4-Port GbE VPN Routing Computer, w/ miniPCI & SIM slot

Includes:

- JetBox 9463G-w
- Console cable x1
- Attached 2-pin power terminal block
- Attached 5-pin DIO terminal block x2
- Attached blanket to cover SD card slot
- DIN-rail kits
- Quick installation guide
- Documentation and software CD-ROM

Optional Accessories

- Additional applications on CF card: CF card capacity is 2G
CF2G-L-J Webmin UI & JamVM for Linux

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