



The Inveneo Hub Server R3

The ultra low-power, easy-to-use network server

The Inveneo Hub Server R3 is a low-power, highly configurable server that is a key component of the Inveneo Communications System. The Hub Server R3 provides system management, storage, and network connectivity for low-power computing and telephony networks in rural areas.

Both the Inveneo Communications Station and the Inveneo Computing Station are designed to connect via traditional LAN or Long-Distance WiFi LAN to the Inveneo Hub Server R3, providing a complete ICT solution.

The Inveneo Hub Server R3 is a Linux-based server that provides:

- File storage for documents and shared content

- Intranet Web Server
- Firewall and NAT Security
- Print Server
- Internet content caching & filtering
- IP-PBX functionality; telephone switching that includes dial-tone, the ability to conference, transfer, voicemail, dial-by-extension, with connection to public switched telephony networks available via optional VoIP service provider or cellular adapter

The Hub Server R3 can be configured with a variety of hardware options to interconnect to the public switched telephony network (PSTN), a GSM/CDMA wireless network (via GSM modem), satellite, or standard wireless or wired broadband networks.

Key hardware design features include:

- Two 2.5 inch laptop hard disks for lower power consumption, with RAID1 drive mirroring to minimize downtime or data loss in case of drive failure

- Extremely low (less than 25W) power consumption
- 12V DC or 110/240V AC adaptor

Key software design features include:

- Pre-configured with Inveneo Hub Linux. Windows XP or Windows Server software are optional
- Ships pre-configured for turnkey installation – custom configuration possible via web administration

Since the Inveneo Hub Server R3 is an open hardware design that operates using Open Source software, all plans and software are published through Inveneo's website. Developers are encouraged to improve upon and customize solutions for their own needs.

Inveneo can also provide customization services to those needing specialized configurations of hardware and/or software, including Microsoft® operating systems.

Inveneo Hub Server R3 Specifications

Processor	1.2GHz VIA C7 nanoBGA2
Chipset	VIA CN700 North Bridge VIA VT8237RP High-bandwidth Vlink Client South Bridge
Memory	1GB PC2-4200
IO/Peripheral Support	One RS-232C serial port (DB-9) Four USB 2.0 ports PS/2 keyboard port (optional enhanced USB Windows keyboard with 104 keys available) PS/2 mouse port (optional PS/2 optical wheel mouse available) VGA video output (DB-15) Optional external USB CD/DVD-R drive
Printers	Local printers can attach through USB
Serial ATA	Two Serial ATA Ports provide 150MB/s (max) data-transfer rate Software RAID included
Storage	80GB, using two 80GB drives in RAID1 configuration Other capacities available upon request
Networking	Two 10/100 Base-T Fast Ethernet, twisted pair (RJ-45) ports
VGA	16/32/64MB frame buffer using system memory Internal AGP 8x performance 128bit 2D/3D VIA S3 Graphics UniChrome Pro Processor 24-bit true-color RAMDAC up to 250MHz pixel
Display support	VESA monitor support, with DDC for automatic setting and resolution and refresh rate Max. resolution and refresh rates (Hz) 64k colors: 1280x1024 @ 85Hz or 1600x1200 @ 60 Hz 16.7M colors: 1024x768 @ 85 Hz
Audio	VIA VT1617A Supports full duplex audio Output: 1/8 inch mini connector, full 16-bit stereo, 48 KHz sample rate Input: 1/8 inch 8-bit mini microphone
Dimensions	76(D) x 184(W) x 190(D) mm 3(H) x 7.25(W) x 7.5(D) inches
Shipping weight:	3.6 kg (8 lbs)
Environmental	Powered on: 10° to 40°C (50° to 104°F) Powered off: -10° to 60°C (-14° to 140°F) Convection (fanless) cooling Humidity: 20% to 80% noncondensing Operating altitude range: 0 to 3050 meters (0 to 10,000 feet)
Power:	12 VDC direct, or auto-sensing 100-240VAC 50/60Hz power supply
Regulatory compliance:	UL 60950, TUV-GS, CSA 60950, FCC Class B, CE, VCCI, C-Tick



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