

IAS Router EXTREME18

The IAS Router EXTREME18 is unlike other commercially available enterprise routers in that it has been designed from the ground up as a small form factor IP networking appliance that performs the roles of several stand alone IT networking and computing devices. IAS Router EXTREME18 provide users with enterprise class IP networking routing capabilities, a VPN concentrator, a managed Ethernet switch, and a virtual machine server. The IAS Router EXTREME18 accomplishes all this in a form factor that is small and extremely portable given its expansive port density and capabilities. The IAS Router EXTREME18 is one quarter the size of comparable commercial routers, yet the IAS Router EXTREME18 has the processing horsepower needed to perform the role of a Virtual Machine Server. The IAS Router EXTREME18 is also able to run Cisco's ESR5921 or ASAv for users to desire to use Cisco's router IOS but wish to leverage the IAS Router EXTREME18 form factor.



The IAS Router EXTREME18 can be ordered in many OS configurations, to include: IAS Router, Cisco's ESR5921, VMware vSphere, and Citrix XEN Server. The IAS Router EXTREME18, running IAS Router Firmware, supports most commercial VPN modes of operation, interoperable with various vendors, including both SSL and IPSEC based VPN modes, but also includes the National Security Agency's (NSA) Suite B cryptography based VPN modes known as the High Assurance Internet Protocol Security Internet Protocol Minimum Essential Interoperability Requirement's (HAIP Sec. IPMEIR).

Whereas traditional off the shelf enterprise class routing hardware is big and bulky, and not conducive to being "back-packable" the IAS Router EXTREME18's small size and weight make portable transport pain free. Should traditional IT rack mounting be desired, two IAS Router EXTREME18 units can be used side by side within 3U of rack space and only take up 9" of depth. The IAS Router EXTREME18 offers hard mounting points for KG-250x units, and mounting points for affixing itself in ridged mount applications. IAS Router EXTREME18 can be ordered with either a total of 18 routable Gigabit Ethernet interfaces, or can be ordered with an optional 8 port Small Form-factor Pluggable (SFP) modules, or a combination of Gigabit Ethernet and SFP modules can be supported. This affords users network interface flexibility depending upon their individual requirements. Users can mix and match their fiber interfaces as they need, and do so using SFP transceivers from their vendor of choice. The IAS Router EXTREME18 additionally includes an integral Uninterruptible Power Supply (UPS), that when used with an IAS approved battery provides users piece of mind that their IAS Router EXTREME18 will remain up and running in the most austere operating environments. The IAS Router FIBER consumes less than 65 watts of current in full utilization, and can be powered by 10-30 VDC or with the provided 85-264 VAC 47-63Hz power brick. Contact IAS for additional details or a demonstration.

Applications:

- IP Networking Router / VPN Concentrator
- Managed Ethernet Switch
- Virtual Machine Server

IAS Router EXTREME18 Features:

- 18 - Gigabit Routable interfaces (SFP modules optionally available)
- RS232 Console Port
- 2 - RS232 serial Ports
- 4 - USB 3.0 Ports
- DVI & HDMI video output (optional)
- Analog Audio input/output
- NSA Suite B IPsec VPN (IPMEIR)
- IPsec & SSL VPN modes (Cisco comp.)
- Enterprise Routing Protocols & Capabilities
- Intuitive Web browser based GUI: IAS Router OS, VMware vSphere & Citrix XEN
- Cisco ESR5921 / Cisco IOS (optional)
- Integral Uninterruptible Power Supply Logic
- KG-250X Hard Mounting Points
- 4.5" Tall x 8.25" Wide x 9.0" Deep
- 6.3 Lbs
- 85~264 VAC 47~63Hz Auto Ranging Auto Sensing Power Supply

The IAS Router EXTREME18

Government and Military Communicators are often forced to use large, power hungry, enterprise class IP networking appliances to meet expansive requirements. Whereas these appliances may meet the technical requirements of the user, they are often designed as traditional IT rack mount gear and no consideration has been made to keep their size, weight and power consumption to a minimum in support of portable use. The IAS Router EXTREME18 is a first of its kind, built from the ground up small form factor IP networking router, managed switch, virtual machine server, and general purpose computing appliance/converged device. The IAS Router EXTREME18 has been designed to support Government and Military Communicators with high port density/small form factor requirements in portable or dynamic use scenarios. Weighing less than 7 pounds (approx. 3 Kilograms), measuring less than 316 cubic inches in volume (4.5" tall by 9.0" deep by 8.25" wide) the IAS Router EXTREME18 is truly portable.

The IAS Router EXTREME18 uses the Intel E3-1220LV2 ultra low power (17watt) 22nm technology 2.3 GHz 2 core 4 thread server processor. This processor supports Intel's VT-d & VT-x virtualization technologies, as well as supports Intel's AES New Instruction set, Enhanced SpeedStep, vPRO, and Turbo Boost Technologies. IAS Router EXTREME18 comes standard with 16 Gig of RAM, allowing for complex virtualization implementations /environments. The flexibility of the IAS Router EXTREME18 is unprecedented, and is only limited by the user's configuration imagination.

The IAS Router EXTREME18 is OS flexible. Customers who desire Cisco IOS support can do so leveraging Cisco's ESR5921 "software router" firmware, effectively turning the IAS Router EXTREME18 into a Cisco Router. However, other IAS Router EXTREME18 options are running IAS Router firmware natively, running a Type 1 Bare Metal Hypervisor natively and running IAS Router Firmware or Cisco ASA as a virtual machine. Additionally, other virtual machines can be run in support of whatever the users needs are. This might include a WAN accelerator, Radio over IP software server, VoIP server, etc. The IAS Router EXTREME18 OS options are vast, and IAS is ready, willing, and able to support customers' specific desires and applications on a case by case basis as needed.

Looking for an IAS Router EXTREME18 like device that supports SFP interfaces? TEMPEST Level 1 Compliant? RoIP E&M ports? 802.11 Wi-Fi Radios? MESH Networking capabilities? Contact IAS for information on the IAS Router EXTREME18.

Technology:

Cisco Router IOS

- ESR5921 (Optional, contact IAS for information)

Virtual Machine Hypervisors

- VMware vSphere, Citrix XEN, KVM, Hyper-V

IAS Router OS

- Internet Protocol version 4 (IPv4) and version 6 (IPv6)
- Dynamic Host Configuration Protocol (DHCP) server and client
- NSA Suite B Cryptography
- IPSEC and SSL virtual private networking (VPN) modes
- Internet Key Exchange version 1, 2 (IKEv1, IKEv2) and MOBIKE
- Generic Routing Encapsulation (GRE) tunnels
- Open Shortest Path First (OSPF)
- Network Address Translation (NAT)
- 802.1q standard (VLAN)
- Load Balancing
- QoS / Traffic Shaping
- MAC filtering
- Firewall
- Zone Based Firewalls
- Intrusion Detection Security / Intrusion Protection Security
- Content Filtering
- Remote Configuration and Monitoring
- Simple Network Management Protocol version 3 (SNMPv3)
- Protocol Independent Multicast
- IGMP
- Access Control Lists
- Network Time Protocol (NTP) capable
- Next Hop Resolution Protocol (NHRP)

Interface:

- 18 - Gigabit Ethernet ports - Individually assignable
- 1 - RS232 Console Port
- 4 - USB 3.0
- 2 - RS232 Ports
- DVI & HDMI video output (optional)
- Analog Audio input/output

Performance:

- Routing: Wire Speed
- Suite B IPsec Throughput: > 250 Mbps Aggregate

Management:

- Configuration: CLI, Web browser GUI, Backup/Restore
- SNMP
- Syslog

Miscellaneous:

- Power: 10-30 VDC input, 85~264 VAC 47/63Hz Auto Ranging Auto Sensing PSU Included
- Power Consumption: Max. 65 Watts
- Operating Temperature: 0C ~ +70C Operating Humidity: 5% ~ 95% (non-condensing) Storage Temperature: -40 ~ +85C
- Warranty: 1 year