**Information ASSURANCE** S P E C I A L I S T S

# IAS VPN Gateway Modules

The IAS Router VPN Gateways are unlike any other small form factor IP networking appliances available in the market today. No other small form factor IP router/VPN gateway device provides the level of performance, breath and depth of security and routing functionality, and capabilities that the IAS Router VPN Gateways do. IAS Routers have been designed from the ground up to solve the many diverse and complicated challenges that Government and Military Communicators face, and does so in the smallest, lightest weight, and easiest to use form factor. Responding to customer demand, IAS is proud to announce a family of small form factor, low power, high performance embeddable IAS VPN Gateway Modules.
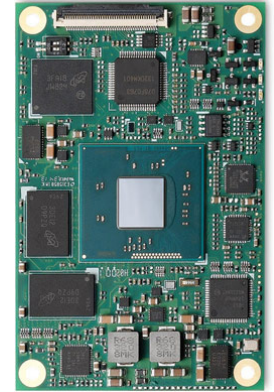
The IAS VPN Gateway Modules are available in three different variants, making it easy to choose the correct module for your specific application. IAS VPN Gateway Modules are available in two different form factors, and in two different levels of processing performance/power consumption. Like our off the shelf IAS Router VPN Gateways, the IAS VPN Gateway Modules support a wide range of WAN/LAN technologies, from gigabit Ethernet, to Wi-Fi Client/WAN and Access Points, to 3G/4G LTE cellular, to legacy serial based modems. They run our FIPS 140-2 Validated, NIAP Common Criteria Certified, NSA CSfC Component List listed IAS Router firmware, and support our enterprise class suite of routing and security capabilities. Integrators only need to add an off the shelf of custom carrier card to create a new NSA CSfC complaint product. Unlike other embeddable routers offerings, the IAS VPN Gateway Modules offer an unrestricted number Ethernet inferences, Wi-Fi radios, 3G/4G LTE cellular modems and serial ports. An integrator is only limited by their engineers' imagination. Don't have a carrier card? IAS can help with that as well.

### IAS VPN Gateway Module COMPACT

- 3.7" x 3.7" footprint
  - COM Express Type 6 interface
- 10 Watt processor
- Switching at line rate, Routing over 500Mbps, and NSA Suite B IPSec over 250Mbps aggregate
- Number of Ethernet ports, Wi-Fi Radios and 3G/4G cellular radios unrestricted
- IAS Router 2.2.0 OS - includes IDS functionality
- Cisco IOS (ESR 5921 Optional)

### IAS VPN Gateway Module NANO Plus

- 2.2" x 3.3" footprint
  - COM Express Type 10 interface
- 10 Watt processor
- Switching at line rate, Routing over 500Mbps, and NSA Suite B IPSec over 250Mbps aggregate
- Number of Ethernet ports, Wi-Fi Radios and 3G/4G cellular radios unrestricted
- IAS Router 2.2.0 OS - includes IDS functionality
- Cisco IOS (ESR 5921 Optional)

### IAS VPN Gateway Module NANO

- 2.2" x 3.3" footprint
  - COM Express Type 10 interface
- 3 Watt processor
- Switching at line rate, Routing over 300Mbps, and NSA Suite B IPSec over 50Mbps aggregate
- Number of Ethernet ports, Wi-Fi Radios and 3G/4G cellular radios unrestricted
- IAS Router 2.2.0 OS - includes IDS functionality
- Cisco IOS (ESR 5921 Optional)

The family of IAS Routers cover a wide range of sizes, port densities, performance levels, and levels of environmental robustness. We encourage you to visit our website for additional information at www.IASpecialists.com or contact an IA Specialists representative at 1-202-640-2623.

## Applications:

- Baseband Kits
- Low power/Small Form Factor
- Machine to Machine Applications

# The IAS VPN Gateway Modules
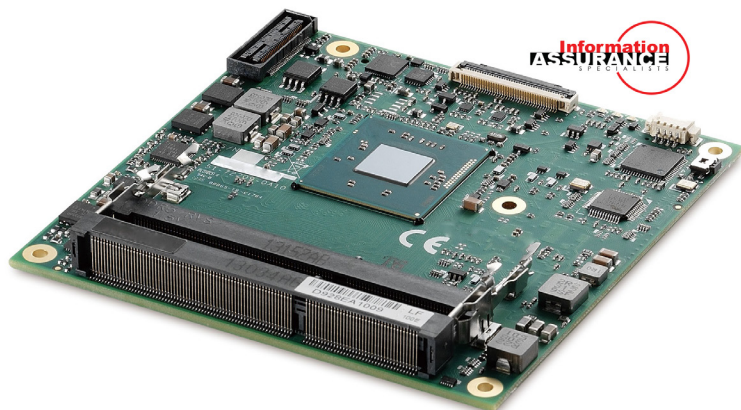
The use of commercial WAN technologies has historically challenged Government and Military Communicators when tasked with implementing NSA Type 1 security appliances, or when leveraging NSA's Commercial Solutions for Classified (CSfC) approved components, to reach classified networks. Communicators are often forced to use multiple devices in order to address any and all IT challenges they could possibly face. Communicators that are forced to use multiple devices to support their ever changing connectivity challenges are burdened with additional size, weight, power consumption and configuration complexity. The IAS Router's patented WAN technology management flexibility allows Communicators to use whatever WAN technology they are provided with, no matter where they are. Like IAS Routers, the IAS VPN Gateway Modules also bake in WAN connectivity support for: Ethernet based WAN technologies such as hotel rooms, portable and fixed satellite terminals, external M2M wireless radios, but also supports 802.11 a/b/g/n/ac Wi-Fi as a client and/or access point. The IAS VPN Gateway Modules additionally supports USB based technologies such as 3G and 4G cellular modems, BGAN terminals, and even works with legacy RS-232 based technologies such as POTS modems, ISDN modems or radios. The IAS VPN Gateway Modules support these and other operational scenarios with its simple to use, logically organized, web browser based graphical user interface.

Government and Military users who need access to classified networks require robust VPN capabilities across a wide array of VPN modes and configurations. The IAS VPN Gateway Modules offer the most robust IPSec VPN mode commercially available (the NSA's Suite B cryptography based Internet Protocol Minimum Essential Interoperability Requirements or IPMEIR) in addition to many other industry standard interoperable VPN modes. The IAS VPN Gateway Modules have obtained placement on the NSA Commercial Solutions for Classified Components List, and are now able to be used in CSfC Comprised Solutions.

As complex as Government and Military networks are, the IAS VPN Gateway Modules are capable of supporting the diverse routing protocols, capabilities, and applications used in networks today and into the future. Unlike other small form factor commercial routers, the IAS VPN Gateway Modules' robust routing capabilities compare to that of large, rack mount, power consuming, noise making enterprise grade routers. The IAS VPN Gateway Modules are the perfect solution for those fielding either the Commercial Solutions for Classified VPN Gateway, Multi-Site Connectivity or Mobile Access Capability Packages.

## Technology:
- 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)
- QoS
- MAC filtering
- Firewall
- Zone Based Firewalls
- Intrusion Detection Security / Intrusion Protection Security
- 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)
- Cisco IOS (Cisco 5921 ESR Optional, contact IAS for informations)

## Interfaces:
- I/O expandable via 3 PCIe lanes
  - Unrestricted 10/100/1000 Base-T Ethernet: RJ-45, Auto MDI-X, Individually assignable
  - Unrestricted USB 3.0 and USB 2.0 ports
  - Unrestricted 802.11 a/b/g/n/ac Wi-Fi radios
  - Unrestricted 3G/4G cellular radios

## Performance:
- Suite B IPSec Throughput: >250 Mbps Aggregate

## Management:
- Configuration: Web browser GUI, Backup/Restore
- SNMP (may be disabled)
- Syslog

## Miscellaneous:
- Size: COMPACT 3.7" x 3.7", NANO/NANO Plus 2.2" x 3.3"
- Power: COMPACT 5~20 VDC power input, Consumption: <15 Watts
  NANO 5~14 VDC power input, Consumption: <15 Watts
  NANO Plus 5~14 VDC power input, Consumption: <5 Watts
- Operating Temperature: 0C ~ +60C