

IAS Router with Epiq Solutions Radio

IAS and Epiq Solutions have teamed to design, develop and produce highly secure, small form factor IP routers with embedded Software Defined Radio (SDR) technology. This portable product line is designed for government and military customers who require security for their communications and other wireless applications.

This IAS-Epiq Solutions' product combines Epiq's low SWaP, extremely flexible Sidekiq™ family of RF transceivers with IAS's lightweight, ruggedized MICRO and PICO routers. The solution provides a powerful combination of SDR applications with NSA CNSA IPsec VPN tunneling over a wide array of WAN technologies.

Integrating Epiq Solutions' SDR technology into IAS' secure IP Routers enables Department of Defense and Government customers to deploy hyper-small RF collection and processing devices and securely backhaul data collected to another location anywhere in the world.

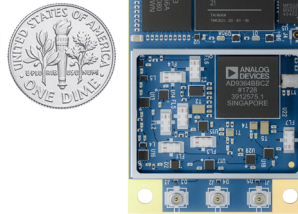


*IAS MICRO and PICO not shown to scale

IAS MICRO*



IAS PICO*



Epiq Sidekiq Z2**

**Shown actual relative size



IAS Router Third Party Validations and Certifications

- NSA Commercial Solutions for Classified Listed
- FIPS 140-2 Level 2 Validated
- NIAP Common Criteria Certified
- DISA UC APL Placement

IAS-Epiq Solution Applications

- CubeSat/UAS data links
- Remote RF Sensing
- Embedded RF
- Locally process and remotely view data
- Securely long-haul data using CNSA IPsec



IAS Router

IAS Routers have been designed from the ground up to solve the many diverse and complicated IP networking and security challenges that Government, Military and Emergency Response Communicators have, and does so in one of the smallest, lightest weight, and easiest to use form factors available in the market today.

IAS Routers are small in size but not in capabilities. Each variant of the IAS Router is a single device, which converges the functionality typically provided by three or more commercial devices.

The IAS Router is the “Swiss army knife” IP networking and security solution for even the most demanding users who need to access classified Government and Military networks while in mobile or dynamic operating environments.

IAS Router Features

- Support for whatever WAN technology, one or more Ethernet, 3G/4G Cellular and Wi-Fi client the user has available to them at that moment and location
- Most robust commercially available IPsec VPN mode of operation (NSA’s CNSA cryptography based IPMEIR)
- Enterprise-grade advanced routing capabilities
- Simple to use web based graphical user interface (GUI)
- Unique ability to host Virtual Machines (VM) on IAS Router OS (Patent Pending), eliminating the need for stand-alone computer appliances in various applications

Epiq Solutions Radio

The Sidekiq family of products provides breakthrough small form-factor software defined radio (SDR) technology, ready for integration into systems that support MiniPCIe, M.2 and other standard form factors. With a flexible 70 MHz to 6 GHz RF transceiver and programmable logic, Sidekiq can immediately transform host devices such as laptops, embedded computers and IAS routers into RF processing powerhouses.

Combining Sidekiq with IAS IP Router technology instantly enables wireless security for custom or turnkey applications already running on Sidekiq, including several GOTS and Epiq Solutions’ turn-key applications such as Skylight™ (Wireless Network Characterization of 2G/3G/4G/5G/IoT/802.11/and others).

The Sidekiq Z2 is integrated into the IAS PICO and is the World’s Smallest Wideband RF Transceiver + Linux Computer in a Production-Ready Module. The Sidekiq Z2 is a field-proven, industrial grade module that can radically simplify typical RF product development.

Sidekiq Z2 Features

- MiniPCIe card form factor (30mm x 51mm x 5mm)
- Xilinx Zynq® XC7Z010-2I System-on-Chip running Linux® on its dual-core ARM Cortex A9 CPU
- 1Rx + 1 Tx; 70 MHz to 6 GHz tuning range
- Provides integrated pre-select filtering
- Boots Linux in under 2 seconds
- USB 2.0 interface to router
- Typical power consumption under 2 Watts