

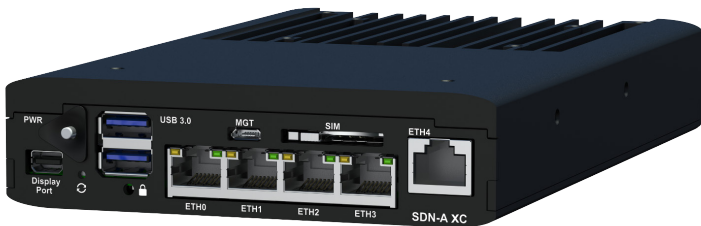
DATASHEET

# SDNA-SDR



## Software Definable Network Appliance with Epiq Solutions™ Radio

Teamed with Epiq Solutions, we designed, developed, and produced a highly secure, small form factor IP routers and Software Definable Network-Appliance (SDN-A) with embedded Software Defined Radio (SDR) technology. This portable product line is designed for government and military customers requiring security for their communications and other wireless applications.



The SDN-A with SDR product combines Epiq's low Size, Weight, and Power (SWaP), Sidekiq™ family of RF transceivers with our lightweight, ruggedized EC SDN-A, SDN-A MICRO, and HRW SDN-A products. The solution provides a powerful combination of SDR applications with NSA CNSA IPsec VPN tunneling over a wide array of commercial network technologies including Ethernet, Wi-Fi, Cellular, MANET, and Satcom.

Integrating Epiq Solutions' SDR technology into our SDN-As 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.

## IP Router Third Party Validations and Certifications

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

## Applications

- CubeSat/UAS data links
- Remote RF Sensing
- Embedded RF
- Locally process and remotely view data securely
- Long-haul data using Commercial National Security Algorithm Suite (CNSA) IPsec

## SDN-A Technology

Our Software Definable Network-Appliance (SDN-A) technology, allows you to create a networking appliance based on your preferred vendor's software-based VNFs. SDN-As support several different VM hypervisors, along with networking function VMs from companies such as Cisco, Aruba, Juniper, Palo Alto, Fortinet, and IAS ROS. When used with IAS ROS hypervisor, users can benefit from the SDN-A's cellular and Wi-Fi transport technologies.

## IAS Router Operating System (IAS ROS)

IAS Router Operating System is a secure, high performance, enterprise-class IP router/ VPN gateway/ Virtual Machine Hypervisor that was custom developed from the ground up to support military and government deployable communications use cases. The IAS ROS uses patented WAN technology management capability providing Communicators:

- Multiple WAN technologies, including Ethernet, 4G/5G Cellular, Wi-Fi WAN and SATCOM
- 802.11ac and 802.11ax Wi-Fi 6 radios as either a traditional Wi-Fi access point and/or Wi-Fi client/WAN
- Simple to use web based graphical user interface (GUI)

## 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 SDN-As into RF processing powerhouses.

Combining Sidekiq with our SDN-A 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).

## 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