

SDN-A™ 2S

Software Definable Network-Appliance™ 2S

The **SDN-A™ 2S** is a Networking Appliance that incorporates two Software Definable Network-Appliances™ (SDN-A™) in a small, low power, rugged

device. By adding software-based virtualized networking functions, it delivers secure, enterprise-level performance while meeting the most stringent mission requirements where ruggedization, security, size, weight, and power are critical. Within a matter of minutes, the SDN-A 2S can be setup in a residence, hotel room, vehicle, aircraft, etc.



SDN-A Technology

The SDN-A 2S leverages Sub-U's Software Definable Network-Appliance (SDN-A) technology, which allows the user to "create" a networking appliance based on their preferred vendor's software-based Virtualized Networking Function (VFN) capabilities. SDN-As have enough processing power, memory, and storage to run multiple virtual machines on a single piece of hardware, significantly reducing the overall size, weight, power consumption, configuration complexity, and cost of convoluted multi appliance deployable communications solutions.

SDN-As support several virtual machine hypervisors, along with networking function virtual machines from companies such as Cisco, Aruba, Juniper, Palo Alto, Fortinet, and SUB-U (IAS). When used with the SUB-U ROS hypervisor, users can benefit from the SDN-A 2S's cellular and Wi-Fi transport technologies.

Executive or Small Team Communications Solution

When configured with two software-based router/VPN gateways, the SDN-A 2S is a compact, lightweight communications solution that enables access to secure voice, data, and video over commercial network technologies including Ethernet, Wi-Fi, 4G/5G Cellular, MANET, and SATCOM. One of the internal SDN-As performs as a black network appliance and the second performs the role of the red network appliance.

The SDN-A 2S can be used with a Type 1 HAIPE device or in NSA Commercial Solutions for Classified (CSfC) applications to access secure networks such as SIPRNet. Depending on its configuration prior to operation, the SDN-A 2S can support all three NSA CSfC data-in-transit Capability Packages (CP): Mobile Access, Multi-Site, and Campus WLAN.

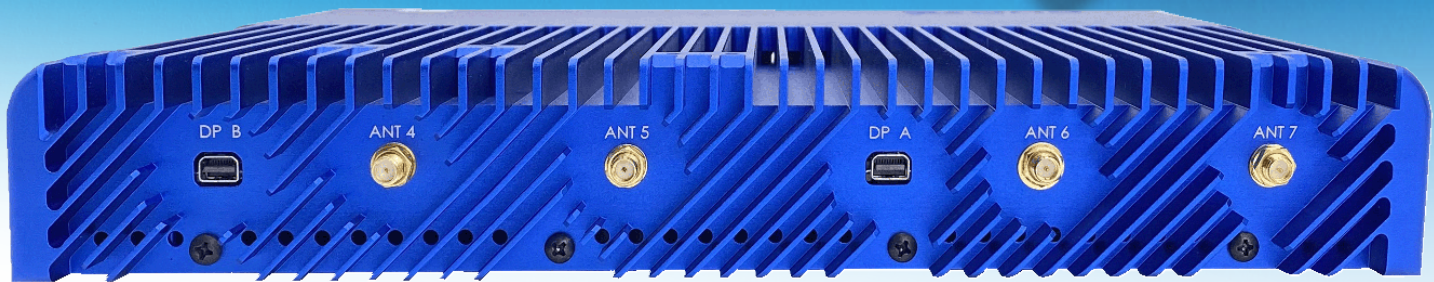
Applications

- ◀ Executive Leadership Communications
- ◀ Emergency Response Teams
- ◀ Forward Operating Bases
- ◀ HUMINT Collection Teams
- ◀ NSA Commercial Solutions for Classified



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SUB-U Router Operating System (ROS)

SUB-U Router Operating System (formerly IAS ROS) 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. SUB-U ROS uses patented WAN technology management capability providing Communicators:

- ◀ Multiple WAN technologies, including Ethernet, 4G/5G Cellular, Wi-Fi, and SATCOM
- ◀ 802.11ac and 802.11ax Wi-Fi 6 radios as either a traditional Wi-Fi access point and/or Wi-Fi client
- ◀ 5 Gigabit RJ45 Ethernet, all routable with individual MAC addresses using Intel Ethernet controllers
- ◀ User accessible SIM slot, that requires no tools to change
- ◀ Optional 2.5" SSD drive "bump" for applications that need up to 8TB of SSD storage
- ◀ USB 3.0, Mini Display Port, and USB console port to support field configurability

Specifications

- ◀ Size: 1.9" Tall x 12" Wide x 8.5" Deep
- ◀ Weight: 6 pounds
- ◀ Power: 9-36 wide range VDC input
- ◀ PSU: 100~240 VAC 50/60Hz
- ◀ Operating Temp: -20°C to +65°C
- ◀ NSA Commercial Solutions for Classified (CSfC)
Aruba Virtual Mobile Controller (VMC) and Cisco
CSR 1000V

Each SDN-A within the SDN-A 2S offers the following external interfaces:

- ◀ (6) Gigabit routed Ethernet ports
- ◀ 802.11 Wi-Fi
- ◀ (1) 802.11af Power over Ethernet port (15 watt)
- ◀ (2) RS-232 serial interfaces
- ◀ (2) USB 3.0 ports
- ◀ (2) USB 2.0 ports

