DATASHEET

SDNA-XC

Expeditionary Communications Software Definable Network-Appliance

The SDNA-XC is a highly portable, rugged software programmable communications solution that combines the functionality of an IP router and a Virtual Machine (VM) server.



The SDNA-XC offers enterprise-class Virtualized Networking Function (VNF) performance in a small size, weight, and low power (SWaP) device that is durable enough to withstand the rigors of mobile and portable use in the most austere locations. The SDNA-XC is part of a family of small, low-profile appliances that can be used individually or paired with other XC appliances as part of assembling a truly scalable executive communications capability. Other XC devices include the SDNA-HK & the SDNA-XC-BANKS.

SDN-A Technology

The SDNA-XC is based on our Software Definable Network-Appliance (SDN-A) technology, which allows



The XC-SDNA offers enterprise-class Virtualized Networking Function (VNF) performance.

users to create an individualized IP networking appliance based on the use of Virtualized Networking Functions (VNFs). SDN-A's support several different virtual machine hypervisors, along with virtual networking functions from companies such as Cisco, Aruba, Juniper, Palo Alto, Haivision. When used with Linux based hypervisor, users benefit from the SDNA-XC's cellular and Wi-Fi transport technologies.

Scalability with other XC Devices

The XC products are modular, interoperable, and scalable with other Expeditionary Communications devices to meet IP networking requirements of any complexity. XC devices enable you to create flexible, scalable, secure, software defined small and light sophisticated comprised solutions to meet nearly any mission requirements.



IAS Router Operating System (IAS ROS)

The 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:

- Offers 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
- 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 require up to 15TB of SSD storage
- USB 3.0, Mini Display Port, and USB console port to support field configurability and various use cases

SPECIFICATIONS

- Size: 7.6" x 5" x 1.25" (LxWxH)
- Weight: <2 pounds
- Machined aluminum enclosure

CONFIGURATION

- Micro USB console
- Mini Display Port with 4K video support
- USB 3.0 interfaces for keyboard/ mouse

POWER

- Wide Range Dirty DC Input: 9~36
 VDC
- Power Consumption: <20 watts (<25 watts with optional 2.5" SSD drive)
- PSU: 100~240 VAC 50/60Hz

SDN-A TECHNOLOGY

- Intel E3950 Atom w/4Cores and 4
 Threads
- 8GB RAM
- mSATA, SD Card (internal), or 2.5"SSD
- Mini- Display Port with 4K video support
- 2 USB controllers, 1 CPU based and 1 standalone component (TI based USB Hub)
- Micro USB Console Port (no need for serial cables)

ENVIRONMENTAL

- Operating Temperature:-20°C ~ +70°C
- Storage Temperature: -40°C ~ +85°C
- Operating Humidity: 5% ~ 95%

WAN TECHNOLOGY

- (5) Gigabit routed Ethernet ports
- (2) USB 3.0
- 802.11ac Wi-Fi client and/or Access Point (optional)
- Built-in 3G/4G/5G cellular radio (optional)

STORAGE

Optional 2.5" SSD (up to 15TB)

VIRTUALIZATION

- Supports most commercial vendors' software-based
 IP networking function and application server based virtual machine technologies
- Supports Intel VT-D and VT-X
 Technology





