

DATASHEET

SDNA-HRW-R

Software Definable Network Appliance Half Rack Width (HRW)

The Software Definable Network-Appliance (SDN-A™) Half Rack Width (HRW) C3000 is a highly portable, rugged, high performance software programmable communications solution that combines the functionality of a tactical IP router and a Virtual Machine (VM) server. It enables users to leverage a multitude of commercial vendors' Virtualized Networking Functions (VNF) paired with application server VMs in a single, small form factor hardware appliance. These include routers, firewalls, IDS/IPS, Windows Server, Linux Server, etc.

The SDNA-HRW-R offers a multitude of commercial networking technologies that include Ethernet (copper and fiber), 802.11ax Wi-Fi 6, 3G/4G/5G upgradable Cellular, and support for additional Ethernet based commercial WAN technologies. Because the SDNA-HRW-R is software programmable. It yields a flexible, scalable, interoperable solution that is future proof. It has enough processing power to support today's software-based IP networking technologies and performance levels to support impending 5G use cases and beyond.

SDN-A Technology

The SDNA-HRW-R leverages our Software Definable Network-Appliance (SDN-A) technology, which



allows you to create a networking appliance based on your preferred vendor's software-based Virtualized Networking Functions (VNF). SDN-As support several different virtual machine hypervisors, along with networking function virtual machines from companies such as Cisco, Aruba, Juniper, Palo Alto, Fortinet, and IAS ROS. When used with the IAS ROS hypervisor, users can benefit from the SDNA-HRW-R's cellular and Wi-Fi transport technologies.

Scalability with Expeditionary Networking Kit

The SDNA-HRW-R is one of family of Half Rack Width appliances designed for use as standalone desktop appliances, within the Expeditionary Networking Kit (XNK) 2U or 3U Chassis System or the XNK-MINI, a carbon fiber VIP roller board case that is small enough to stow in an aircraft overhead storage bin.

Network Functions Virtualization

The SDNA-HRW-R looks and functions like an enterprise-class tactical IP router. It is also a purpose-built x86 based appliance with enough processing power, memory and storage to support run multiple VMs on a single piece of hardware. By leveraging virtualization, the HRW SDN-A C3000 significantly reduces the overall size, weight, power consumption and cost of deployable communications solutions. SDN-As support most commercial vendors' software-based IP networking function and application server based VM technologies, including:

- IAS Router Operation System (IAS ROS) (as a bare metal hypervisor or as a VM)
- Cisco CSR1000V, ASA v, ISR1000v, Viptela/vEdge (on VMware or IAS ROS)
- Aruba Virtual Mobile Controller (VMC) (on VMware or IAS ROS)
- Palo Alto Networks VM Firewall (on VMware or IAS ROS)
- Windows Server 2012 and 2016 VMs (on VMware or IAS ROS)
- Linux VMs (on VMware or IAS ROS)
- Juniper SRXv (on VMware or IAS ROS)

Specifications

- 8.3 x 1.6 x 10.8 inches (WxHxD)
- < 4 lbs, 1.82kg
- Operating Temperature: -4°F ~ +158°F
- Wide Range Dirty DC Input: 9 ~ 36 VDC
- Power Consumption: 30 ~ 40W
- (4) 10 Gigabit SFP+ ports
- (6) 1 Gigabit Ethernet ports
- Up to (2) Cellular radios
- 802.11ac Wi-Fi Enterprise Grade Radio (802.11ax/Wi-Fi 6 upgradable)



Other Half Rack Width Appliances and Related Products

Ethernet Switches

- HRW Cisco ESS3300 – (26) RJ45 1G ports, (2) 10G, (10) 802.3at PoE ports
- HRW Netgear M4300 – 8 10G RJ45 & 8 10G SFP+
- HRW Netgear M4300 - 12 10G RJ45 & 12 10G SFP+
- HRW Netgear M4300 - 24 10G RJ4

Compute Nodes

- HRW Intel® Xeon® D-1500 (8c/16t, 12c/24t, and 16core/32thread variants)
- HRW Intel® Xeon® D-2100IT (8c/16t, 12c/24t, and 16core/32thread variants)
- HRW Intel® Xeon® D-2100IT TEMPEST Level 1

Software Definable Network-Appliances™

- HRW SDN-ATM BaNkS
- HRW SDN-ATM Xeon® D-2100NT w/Intel QAT
- HRW SDN-ATM MICRO

Miscellaneous

- HRW Haivision Kraken Video Transcoder
- HRW AC input – (8) 150watt 24VDC output PSU
- HRW AJ Power Source AC & DC input – 400 watt PSU with scalable UPS battery (8 output)
- HRW JPS Interoperability RoIP appliance