DATASHEET

HRW CN

Half Rack Width Compute Node

Half Rack Width (HRW) Compute Nodes bring a robust enterprise-class cloud computing to the tactical edge of network applications. The HRW CN provides robust computing and real-time data processing at the tactical edge, resulting in reduced command and control (C2) latency and improved situational awareness.

HRW Compute Nodes are small form factor enterprise-class Intel Xeon D2100 processor-based servers with enough processing power, memory and storage to support running multiple virtual machines (VMs) on a single piece of hardware. HRW CN significantly reduce the overall size, weight, power consumption and cost of deployable, large-scale communications solutions. Providing support for most hypervisors and hyper-converged hypervisors, the potential applications and use cases for the Compute Nodes are endless.

Virtual Machine Hypervisors

HRW CN's support an array of commercially available hypervisors and hyper-converged hypervisors, software-based IP networking appliance virtual machines (VMs), and application-based VMs. Supported hypervisors include VMware (ESXi), Microsoft (Hyper-V), Nutanix, Citrix (XEN), IAS ROS, Cisco (NFVIS), and Linux (KVM).

Scalability with Tactical Field Office

The HRW CN is one of the 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.

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Removable Storage

HRW CNs offer a removable disk drive cartridge that holds up to four 2.5" spindle or SSD drives. The cartridge feature allows a user to remove all drives in a single module quickly and easily without tools, simplifying the transportation of compute modules used on classified networks, as all non-volatile memory is removed.

Applications/Benefits

- Signal and image data processing and storage
- Virtual Desktop Infrastructure (VDI) solutions
- Modular Mobile Solutions
- Rapid, scalable, enterprise IT deployment
- Supports tactical use cases

Specifications

- D-2100 series - 8.3 x 1.6 x 12 inches (WxHxD)
- Operating Temperature: 0°C ~ +60°C
- Wide Range Dirty DC Input: 9 ~ 36 VDC
- Weight: 4.2 lbs.

Processor	Cores	Threads	Max RAM	CPU Power Usage	NVMe
XEON D-2183IT	16	32	512GB	100 Watts	Yes

Key Features

- Supports both hyper-converged and traditional bare metal hypervisors (ESXi, Hyper-V, etc.)
- True enterprise-class performance, with 10 Gigabit and Gigabit interfaces and packet processing to match
- Toolless removable hard disk cartridge design (2.5" SSD or HDD up to 11mm tall)
- Half Rack Width form factor (HRW) - Operates stand-alone as a desktop appliance, in Expeditionary Networking Kit (XNK) Chassis, or the XNK–MINI Chassis system (FAA airline overhead compliant)
- Temperature responsive cooling fans, ensuring the quietest operation possible
- 16 cores / 32 threads Intel XEON processors
- 512GB of DDR4 RAM
- USB 2.0/3.0
- Up to 4 SSD/HDD drives (Current state of the art is 15TB per drive,
- 8TB per drive or high use drives)