

TFO-H

Tactical Field Office - Horizontal

The Tactical Field Office–Horizontal (TFO-H) is a modular, scalable deployable communications solution that brings robust, small form factor IT and IP networking infrastructure to field operations. It is the first of its kind integrated solution that combines tactical-edge computing and storage, virtualization (traditional or hyper-converged), and secure IP networking (Type 1 or NSA Commercial Solutions for Classified based).



Modular Design

The TFO solution is modular and can scale to meet the smallest or largest customer requirements, including single person portable and airline carry-on luggage compliant solutions. The TFO-H is comprised of:

- ◀ TFO modules – Half Rack Width (HRW) route, switch, compute, power, and Software Definable Network-Appliances™ (SDN-A™)
- ◀ Software-based network functions and virtualized network appliances
- ◀ TFO chassis system

TFO Chassis System

The TFO-H chassis system is standards compliant and designed to retain HRW appliances and traditional commercial off-the-shelf (COTS) 1U, 2U, or larger IT rack-mount appliances, providing the ultimate in flexibility. The TFO-H chassis can mount into traditional, fixed location IT racks and commercial IT transport cases. Available in 2U and 3U variants, the chassis system scales to any number of HRW, 1U, or 2U appliances, in any combination, to meet your mission requirements. HRW appliances can be inserted into and removed from the TFO chassis system quickly and easily without tools. They can operate freestanding outside the chassis system, as they do not rely on the chassis for power or network interconnectivity, only retention and transport.

HRW Form Factor

The HRW form factor is industry standard one Rack Unit (RU) tall in a half rack width and shallow depth. HRW appliances can be inserted into and removed from the TFO chassis system quickly and easily without tools. They can operate freestanding outside the chassis system, as they do not rely on the chassis for power or network interconnectivity, only retention and transport. The HRW mechanical specification is available to other vendors to encourage an open chassis ecosystem. Eliminating bespoke solutions and proprietary form factors, enables you to implement innovative technology from a range of tactical comms vendors, instead of being tied to just one for the life of a program.

Power and UPS

All HRW appliances operate using wide-range dirty DC, with inputs on the front and back of each device. They support power loss protection using a small, internal Li-Ion “hold up” battery (10-15 minutes). Alternatively, HRW devices offer internal UPS logic to support larger external batteries for longer runtime requirements.



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Sub U Systems offers several Half Rack Width appliances designed for use as stand alone desktop appliances, within the Tactical Field Office 2U~42U Chassis System or the Tactical Field Office – MINI Carbon Fiber VIP case.



TFO-MINI VIP Case

Software Definable Network-Appliances™

- ◀ HRW SDN-A™ BANKS
- ◀ HRW SDN-A™ Xeon D 2100NT w/Intel QAT
- ◀ HRW SDN-A™ C3000 w/Intel QAT
- ◀ HRW SDN-A™ MICRO



Compute Nodes

- ◀ HRW Intel® Xeon® D1500 (8c/16t, 12c/24t, and 16core/32thread variants)
- ◀ HRW Intel® Xeon® D2100IT (8c/16t, 12c/24t, and 16core/32thread variants)
- ◀ HRW Intel® Xeon® D2100IT TEMPEST Level 1

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



Miscellaneous

- ◀ HRW Haivision Kraken Video Transcoder
- ◀ HRW AC input – (8) 150watt 24VDC output PSU
- ◀ HRW AC & DC input – 400 watt total @ 24VDC, (8) output PSU/UPS
- ◀ HRW JPS Interoperability RoIP appliance (8 input w/radio control)

