

# TFO-Mini

## Tactical Field Office-Mini

The **Tactical Field Office-Mini** is a modular, scalable deployable communications transit case solution that brings enterprise class small form factor IP networking, IT capabilities and military tactical communications infrastructure to austere field operations. It is the first of its kind integrated solution that combines open standard

**Half Rack Width** appliances with SUB-U's **Quarter Rack Width**

devices in support of tactical-edge computing and storage, virtualization (traditional or hyper-converged), and secure IP networking.



### Modular Design

The TFO and TFO-Mini solutions are modular and scalable transit case solutions designed to meet the smallest or largest customer requirements. They retain:

- ◀ Half Rack Width (HRW) route, switch, compute, power, & Software Definable Network-Appliances™ (SDN-A™)
- ◀ Quarter Rack Width (QRW) route, switch, compute, power, & SDN-As
- ◀ 3rd Part HRW and QRW RoIP, video transcoder, video wall controllers, power supply/UPS devices, etc.
- ◀ Military Radios, satellite modems, and many other military focused communications devices/appliances

### TFO-Mini Chassis System

The TFO-Mini chassis system and ECS Fusion Carbon Fiber case is Half Rack Width standards compliant; designed to retain 4 HRW appliances and 4 QRW appliances in a rugged, easy to use, tool-less design airline overhead stow-able roller board case that meets the International overhead size requirement (whereas competing solutions do not). The internal TFO-Mini chassis is also able to be removed and inserted into a traditional 4RU rack space, enabling simpler portable to fixed location fielding of truly enterprise class networking equipment.

### HRW Form Factor

The HRW form factor has been created and released as an industry open standard for use by anyone who wishes to design products to the form factor specification. The HRW form factor has been designed to support two appliances side by side within a standard IT rack, and can be inserted into and removed from the TFO chassis system quickly and easily without tools. HRW devices are shallow in depth, supporting easily stow-able transit case solutions. HRW appliances 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 Networking Interconnection

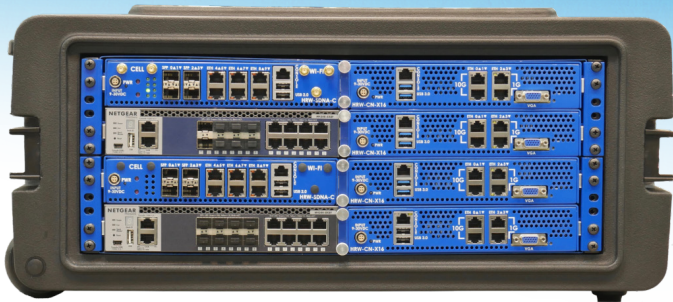
The TFO and TFO-Mini rugged transit case solutions have been designed for use in multi enclave within a single transit case requirements. SUB-U has intentionally not built power and IP networking interface interconnectivity into these transit case systems based on over a decade of customer feedback regarding red/black separation and EMI leak concerns. SUB-U produces products that filter and isolate power at the power supply output and the device power input, ensuring robust EMI design.



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## Tactical Field Office - Mini

Sub U Systems offers many different Half Rack Width appliances designed for use as stand alone desktop appliances, or within the Tactical Field Office - Mini Carbon Fiber VIP case or the scalable 2U~4U Tactical Field Office Chassis Systems.



TFO-Horizontal

### 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)

