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# Herrick Technology Laboratories, Inc.

## Price List



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## **General Information**

### **Pricing and Orders:**

Pricing provided in this document is “Most Favored Customer or U.S. Government” pricing. Additional discounts may be available for quantities greater than those listed. While every effort has been made to ensure the accuracy of this document, HTL reserves the right to change pricing, specifications, options and accessories without notice. Please contact your HTL representative or [Marketing@herricktechlabs.com](mailto:Marketing@herricktechlabs.com) for a quotation and the latest technical data.

### **Delivery:**

FOB Origin. Delivery of the products contained in this document is typically accomplished within 120 to 180 days after receipt and acceptance of an order. HTL recognizes that schedule requirements vary and in many cases is able to accommodate. Purchase of the optional SAASM GPS requires proof of having COMSEC/STARS account and demonstrable ability to handle SAASM devices at the time of delivery. Please contact your HTL representative or [Marketing@herricktechlabs.com](mailto:Marketing@herricktechlabs.com) with your requirements.

### **Payment Terms:**

As a small business HTL requests performance-based payments per FAR-32-104(b)(c)(d). Payment schedules will be negotiated prior to award.

### **Warranty:**

HTL warrants products to be free from defects in materials and workmanship for a period of two (2) years from the date of shipment.

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### **Contact:**

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## HTLx Core Module; HTLx-U

### Miniature Quad Transceiver



**HTLx Core Module**  
Shown with Apple iPhone 6



**HTLx with Universal Enclosure (HTLx-U)**

### ***DESCRIPTION***

#### **Small Form-Factor Multichannel HF/VHF/UHF/Microwave Transceiver**

The HTLx is a 4 channel Software Defined Radio designed to support various ES and EA missions.

- Extended frequency range 2 MHz-18000 MHz
- 80 MHz IFBW (320 MHz total coverage)
- 80+dB SFDR
- 4 Phase-Coherent or Independently tuned Transceivers (remotely configurable)
- Integrated commercial GPS with INS, optional SAASM, low noise CSAC.
- High performance FPGA including integrated ARM9 cores with NEON coprocessors enable high performance signal processing applications against modern waveforms.
- 2x10GbE Ethernet ports for high speed data transfer.
- Wideband recorder Interface port.
- Optional Removable Media Module (RMM)

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- Open Architecture including an SDK with Board Support Package to enable rapid development of new capabilities.
- HTLx-U is the HTLx core integrated in the Universal tactical package, which is ideal for rugged mobile applications where IP67 water-immersion resistance is not required.

## HTLx

### Miniature Quad Transceiver

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
HTLx Core without SAASM unencrypted	HTLx-101150001	Miniature Quad VHF/UHF/Microwave Transceiver. Core Module without SAASM, Network boot ready	\$93,500.00	\$88,825.00	\$86,955.00
HTLx Core with SAASM unencrypted	HTLx-102150002	Miniature Quad VHF/UHF/Microwave Transceiver. Core Module with SAASM, Network Boot Ready	\$100,000.00	\$95,000.00	\$93,000.00
HTLx Core without SAASM encrypted	HTLx-101100001	Miniature Quad VHF/UHF/Microwave Transceiver. Core Module without SAASM, RMM Ready	\$93,500.00	\$88,825.00	\$86,955.00
HTLx Core with SAASM encrypted	HTLx-102100002	Miniature Quad VHF/UHF/Microwave Transceiver. Core Module with SAASM. RMM ready.	\$100,000.00	\$95,000.00	\$93,000.00
HTLx-U without SAASM	HTLx-U101100003	Miniature Quad VHF/UHF/Microwave Transceiver. Core Module mounted in the Universal Enclosure with RMM and without SAASM	\$110,250.00	\$104,737.50	\$102,532.50

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HTLx-U with SAASM	HTLx-U102100004	Miniature Quad VHF/UHF/Microwave Transceiver. Core Module mounted in the Universal Enclosure with RMM and with SAASM	\$116,750.00	\$110,912.50	\$108,577.50
HTLx-U/RMM	911-00048-001	Removable Media Module for HTLx-U	\$2,100.00	\$2,100.00	\$2,100.00

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## HTLx-T2

### Miniature Quad Transceiver



HTLx-T2

#### **DESCRIPTION**

##### **Small Form-Factor Multichannel VHF/UHF Transceiver**

The HTLx-T2 is a 4 channel Software Defined Radio designed to support various ES and EA missions in the tactical environment.

- Extended frequency range 2 MHz-18000 MHz
- 80 MHz IFBW (320 MHz total coverage)
- 80+dB SFDR
- 4 Phase-Coherent or Independently tuned Transceivers (remotely configurable)

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- Integrated commercial GPS with INS, optional SAASM, low noise CSAC.
- High performance FPGA including integrated ARM9 cores with NEON coprocessors enable high performance signal processing applications against modern waveforms.
- 2x10GbE Ethernet ports for high speed data transfer.
- Wideband recorder Interface port.
- Optional Removable Media Module (RMM)
- Open Architecture including an SDK with Board Support Package to enable rapid development of new capabilities.
- Environmentally rugged electronics enclosure qualified for IP67 water immersion at 1 meter for 30-minute duration

## HTLx-T2

### Miniature Quad Transceiver

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
HTLx-T2 without SAASM	HTLx-T2101100005	Tactical Miniature Quad VHF/UHF Transceiver 2 MHz to 18 GHz with RMM without SAASM	\$119,700.00	\$113,715.00	\$111,321.00
HTLx-T2 with SAASM	HTLx-T2102100006	Tactical Miniature Quad VHF/UHF Transceiver 2 MHz to 18 GHz with RMM, with SAASM	\$126,200.00	\$119,890.00	\$117,366.00
HTLx-T2/RMM	911-00048-001	Removable Media Module for HTLx-T2	\$2,100.00	\$2,000.00	\$2,000.00



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## DF1/DF2

### Switched 4 Element 20 MHz-6 GHz DF Antenna



DF1



DF1 System Block

#### DESCRIPTION

##### Switched 4 Element 20 MHz-6 GHz DF Antenna

- 20 MHz – 6 GHz Coverage
- DF Accuracy < 5 degrees
- 2 Channels: 1 Switched 4 Element + 1 Omni
- Low SWAP
- Supports On-the-Move (OTM), At-the-Halt (ATH), and Fixed-Mount Collection & Geolocation
- Quick-Connect single connector and coupling nut mating

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## DF1/DF2

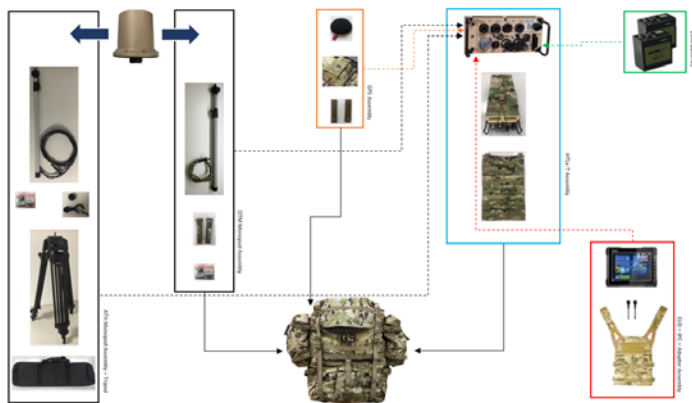
### Switched 4 Element 20 MHz-6 GHz DF Antenna

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
DF1	911-00002-001	Switched 4 Element 20MHz-6GHz DF Antenna	\$39,950.00	\$37,952.50	\$37,153.50
DF2	910-00230-001	Switched 4 Element 20MHz-6GHz DF Antenna with improved EW protection	\$39,950.00	\$37,952.50	\$37,153.50
Monopod 6'	910-00046-001	Telescopic Monopod, integrated 6' (OAL) radio-DF interface cable (RF, Power, & Control)	\$6,200.00	\$5,890.00	\$5,766.00
Monopod 12'	910-00046-002	Telescopic Monopod, integrated 12' (OAL) radio-DF interface cable (RF, Power, & Control)	\$6,800.00	\$6,460.00	\$6,324.00
Fixed-Mount 6'	910-00225-001	Fixed-Mount DF Interface 6' radio-DF interface cable (RF, Power, & Control)	\$6,150.00	\$5,842.50	\$5,719.50
Fixed mount 12'	910-00225-002	Fixed-Mount DF Interface 12' radio-DF interface cable (RF, Power, & Control)	\$6,550.00	\$6,222.50	\$6,091.50
Breakout Cable	915-00069-001	Breakout (MIL-CIRC) to SMA Cable Kit to be used with HTLx-U	\$2,583.00	\$2,453.85	\$2,402.19

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# HPACK

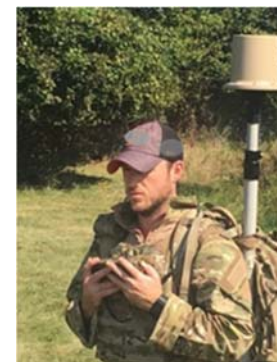
## Quad Transceiver Manpack System



HPACK system Block diagram



HPACK ATH Kit



HPACK OTM Kit

### DESCRIPTION

**HPACK System: Modular & Expandable system of soldier-worn & portable, rugged SIGINT system components which can be configured to meet various manpack system mission requirements.**

- Next generation manpack SIGINT Transceiver System is centered around the HTLx-T2 which is based on the HTLx small SWaP-C Software Defined Radio (SDR) wideband transceiver.
- Manpack System is designed to meet the rugged tactical and environmental demand of dismounted and true OTM missions.
- Manpack System provides everything needed to perform Collection and Geolocation missions in a single package for standalone operations or as part of distributed a processing system
- Manpack (one man carry) for OTM and ATH operation
- Full SIGINT mission support, including:
  - Detection, Identification, Copy and Dissemination of TAS, TCS and TOS SOI

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- Electronic Support (ES) and capable of Special Purpose Electronic Attack (SPEA)
- Geolocation
  - Single sensor DF, OTM and ATH
  - Contributor to TNG network by acting as JICD 4.2 TDOA/FDOA collector node or by providing complete geo solutions within a network of cooperative sensors
- Primary user interface is Getac T800, rugged Windows tablet
  - Optional Android GOTS open framework ATAK interface
- Interoperable with COTS MANET and GOTS COMMs devices

## HPACK

### Quad Transceiver Manpack System

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
H-PackT2	HPACKT2-102100003	HTL Tactical Manpack ESM System	\$194,500.00	\$184,775.00	\$180,885.00

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## DR-4

### Small Form-Factor Wideband Recorder



**DR-4 Small Form-Factor Wideband Recorder (shown with HTLx-U)**

#### **DESCRIPTION**

##### **Small Form-Factor Wideband Recorder**

The DR-4 is an SSD array which is interoperable with multiple HTL radio transceivers to support a variety of recorder-based ConOps.

- Interoperable with HTLx & HTLw based systems to provide RF record/RF playback capability from 2 MHz to 18 GHz
  - HTLx: Record/playback one to four 80 MHz channels
  - HTLw: Record/playback one 1000 MHz channel
- Recorded data is precision time-stamped

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- Low SWaP recorder: 2U, 3.47”H x 5.65”W x 9.5”D, 3.4 lbs. (with SSDs), 50W typical
- Four removable COTS 2.5” PCIe NVMe SSDs
- Selectable Recording Bandwidth:
  - HTLx: 80,70, 60, 50, 40, 30, 20, 18, 10, 5 and 1.25 MHz
  - HTLw: 1000, 500, 250, and 100 MHz
- Thunderbolt 3.0 Data Offload

## DR-4

### Small Form-Factor Wideband Recorder

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
DR-4	DR4-2000001	Small Form Factor Wideband Recorder Chassis only. Does not include SSD's. Qty 4 SSD's required (see SSD options below).	\$27,500.00	\$26,125.00	\$25,575.00
DR-4/SSD3.84TB	911-00064-001	Lot of 4 SSD's. 3.84 TB Commercial Temp mounted in removable trays.	\$9,980.00	\$9,481.00	\$9,281.40
DR-4/SSD7.6TB	911-00081-001	Lot of 4 SSD's. 7.6 TB Commercial Temp mounted in removable trays.	\$ 15,860.00	\$15,067.00	\$14,749.80

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## HTLw

### Miniature Quad Transceiver



**HTLw Core Module**  
Shown with Apple iPhone 6



**HTLw with Universal Enclosure (HTLw-U)**

#### **DESCRIPTION**

##### **Small Form-Factor Multichannel Microwave Transceiver**

The HTLw is a 4 channel Software Defined Radio designed to support various missions.

- Extended frequency range 2 MHz-18000 MHz
- 1 GHz instantaneous BW / channel, 4 GHz total.
- 80+dB SFDR
- 4 Phase-Coherent or Independently Tuned Transceivers (remotely configurable). Multi-unit coherency support
- Integrated commercial GPS with INS, optional SAASM, low noise CSAC.
- High performance FPGA including integrated ARM9 cores with NEON coprocessors enable high performance signal processing applications against modern waveforms.
- 2x10GbE Ethernet ports for high speed data transfer.
- Wideband recorder Interface port.
- Optional Removable Media Module (RMM)

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- Open Architecture including an SDK with Board Support Package to enable rapid development of new capabilities.
- HTLw-U is the HTLw core integrated in the Universal tactical package, which is ideal for rugged mobile applications where IP67 water-immersion resistance is not required.

## HTLw

### Miniature Quad Transceiver

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
HTLw without SAASM	HTLw-101100001	Miniature Quad VHF/UHF/Microwave Wideband Transceiver. Core Module. With SAASM	\$131,650.00	\$125,067.50	\$122,434.50
HTLw with SAASM	HTLw-102100002	Miniature Quad VHF/UHF/Microwave Wideband Transceiver. Core Module. Without SAASM	\$138,150.00	\$131,242.50	\$128,479.50
HTLw-U without SAASM	HTLw-U101100003	Miniature Quad VHF/UHF/Microwave Wideband Transceiver mounted in the Universal Enclosure w/ Commercial Front Panel. With RMM. Without SAASM	\$141,900.00	\$134,805.00	\$131,967.00
HTLw-U with SAASM	HTLw-U102100004	Miniature Quad VHF/UHF/Microwave Wideband Transceiver mounted in the Universal Enclosure w/ Commercial Front Panel. With RMM. With SAASM	\$148,400.00	\$140,980.00	\$138,012.00
HTLw-U/RMM	911-00048-001	Removable Media Module for HTLw-U.	\$2,100.00	\$2,100.00	\$2,100.00



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# HTLv-1

## 3U VPX Quad Transceiver Module



HTLv-1, 3U VPX Quad Transceiver Module

### *DESCRIPTION*

#### **3U OpenVPX Quad Channel HF/VHF/UHF Transceiver Module**

The HTLv-1 is a multichannel Software Defined Radio packaged as a 3U REDI/VITA 67.3 conduction-cooled VPX module designed to support various missions.

- Extended Frequency range 2 MHz – 6 GHz
- 80 MHz IFBW (320 MHz total coverage)

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- 80+dB SFDR
- 4 Phase-Coherent or Independently tuned Transceivers (remotely configurable)
- Pluggable Unit-to-Unit Coherency Via OpenVPX Backplane VITA 67.3
- High performance FPGA including integrated ARM9 cores with NEON coprocessors enable high performance signal processing applications against modern waveforms.
- Processors Linked together through SERDES Transceivers and Hybrid Memory Cube
- Platform enables high performance signal processing applications against modern waveforms.
- Open Architecture including an SDK with Board Support Package to enable rapid development of new capabilities.

## HTLv-1

### 3U VPX Quad Transceiver Module

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
HTLv-1	910-00074-002	3U VPX Quad Transceiver Module, 2 MHz to 6 GHz	\$46,350.00	\$44,032.50	\$43,105.50

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## HTLv-2

### 3U VPX Dual Transceiver Module



HTLv-2, 3U VPX Dual Transceiver Module

#### ***DESCRIPTION***

##### **3U OpenVPX Dual Channel HF/VHF/UHF/Microwave Transceiver Module**

The HTLv-2 is a multichannel Software Defined Radio packaged as a 3U REDI/VITA 67.3 conduction-cooled VPX module designed to support various missions.

- Extended Frequency range 2 MHz – 20 GHz
- 80 MHz IFBW (320 MHz total coverage)
- 80+dB SFDR

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- 2 Phase-Coherent or Independently tuned Transceivers (remotely configurable)
- Pluggable Unit-to-Unit Coherency Via OpenVPX Backplane VITA 67.3
- High performance FPGA including integrated ARM9 cores with NEON coprocessors enable high performance signal processing applications against modern waveforms.
- Processors Linked together through SERDES Transceivers and Hybrid Memory Cube
- Platform enables high performance signal processing applications against modern waveforms.
- Open Architecture including an SDK with Board Support Package to enable rapid development of new capabilities.

## HTLv-2

### 3U VPX Dual Transceiver Module

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
HTLv-2	910-00075-002	3U VPX Dual Transceiver Module, 2 MHz to 20 GHz	\$48,900.00	\$46,455.00	\$45,477.00

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# PNTRv

## 3U VPX Reference Module



**PNTRv, 3U VPX Reference Module**

### *DESCRIPTION*

#### **3U OpenVPX Precision Navigation and Timing Reference Module**

The PNTRv design requirements were derived from the Joint Airborne SIGINT Architecture (JASA) specification. The key specifications of interest for the design of the PNTR from the JASA specification follow. It should be noted that JASA defines a Threshold and an Objective set of requirements.

- Provides low noise 100 MHz reference using Low Noise Chip Scale Atomic Clock (LNCSAC)
- Integrated inertial navigation system (INS) with GPS
- Optional SAASM GPS available with RS232 key fill connectivity
- 100 MHz outputs
- Programmable 250 MHz outputs
- Output 1 PPS synchronous to 100MHz
- On board antenna switching to devices
- 1 GbE Control Interface to OpenVPX Backplane

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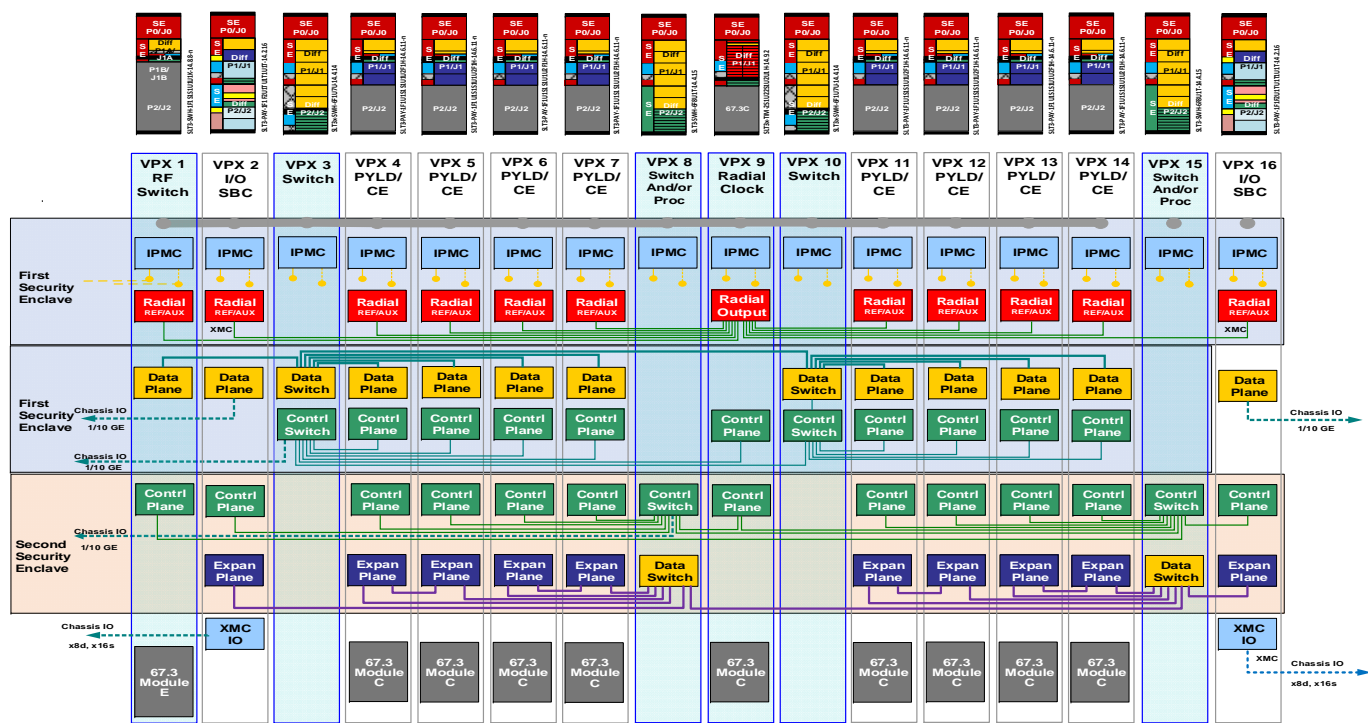
## PNTRv

### 3U VPX Reference Module

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
PNTRv without SAASM	910-00076-001	3U VPX Precision Navigation and Reference Module without SAASM	\$37,500.00	\$35,625.00	\$33,131.25
PNTRv with SAASM	910-00076-002	3U VPX Precision Navigation and Reference Module with SAASM	\$44,000.00	\$44,000.00	\$44,000.00



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16 Slot Backplane



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## HTLv-C

### 3U VPX Chassis

Model	Part Number / Option Number	Description	Unit Price		
			1 to 5	6 to 15	16 to 25
HTLv-C	HTLv-C-19	3U VPX Chassis and Backplane, includes chassis manager and system support module	\$149,500.00	\$142,025.00	\$139,035.00
3UVPX Power Supply 650W	300-00028	Module 3U VPX Power Supply (VITA62) 650W, 48.2 cond Cooled	\$5,900.00	\$5,605.00	\$5,487.00
3UVPX IO SBC	910-00183-001	Module 3U VPX IO SBC, w/XMC	\$43,000.00	\$40,850.00	\$39,990.00
3UVPX Ethernet Switch	300-00025	Module 3U VPX Ethernet Switch, 12 port Victory-Compliant, 48.2	\$36,000.00	\$34,200.00	\$33,480.00
3UPCIE Switch	300-00029	Module 3U,PCIE Switch	\$11,000.00	\$10,450.00	\$10,230.00