



LAND



SEA



AIR

# HPES-S113420



- 48 Ports 10/25GbE/12 Ports 40G/100G
- Scalable L2 and L3 Ethernet switch
- Extended Temperature -30°C ~+60°C
- MIL-STD-810 Environment
- Vibration Method 514.7, Shock Method 516.7

CUMULUS



SONIC

## 1. Key Features

- 4.8T Layer 2 & Layer 3 high-density ToR switches with multi-rate 100GbE ports support 10/25/40/50/100GbE
- 48 ports of 10/25GbE and 12 ports of up 100GbE in compact form factor.
- Scalable L2 and L3 Ethernet switch with QoS and a full complement of standard-based IPv4 and IPv6 features, including OSPF and BGP routing support.
- L2 multipath support via Virtual Link Trunking (VLT) and Routed VLT support.
- Extensive tunneling capabilities such as IP-in-IP, GRE, MPLS, VXLAN and Geneve.
- Advanced QoS/traffic management feature set such as DCB, RoCE v2 to enable convergence of compute and storage on Leaf/Spine Fabric
- IEEE 1588 V1 and V2 (Cumulus Linux 4.4 above) timing synchronization Precision Time Protocol (PTP,) on network devices infrastructure
- Support Link Aggregation and LACP (Link Aggregation Control Protocol)
- Increase VM Mobility region by stretching L2 VLAN within or across two DCs with unique VLT capabilities.
- Converged network support for Data Center Bridging, with priority flow control (802.1Qbb), ETS (802.1Qaz), DCBx and iSCSI TLV
- DC 220 VDC PSUs MIL/COTS DC EMI POWER LINE FILTER
- Open Ethernet available with Cumulus Linux, ONIE and SONIC

## 2. Specifications

### SYSTEM

System Power (min/max)	Intel® Core™ i7-9700 Processor(8 Core, 3.00GHz, Up to 4.70Ghz)
System Operating Temperature range	-30°C ~ +60°C
Storage Temperature range	-40°C ~ +72°C
System Latency	425ns

### I/O PORT

Data plane ports (form factor/quantity)	SFP28/48, QSFP28/12
Data plane port config/modes supported	100/50/40/25/10
Connectors	SFP28, QSFP28
OOB port	1/RJ45
Console	1/RJ45 Form Factor
USB I/F	1/Type C (Console)
BMC Port	Optional (Share with OOB)
LEDs (System, Port, etc.)	System, Diag mode, OOB Link, Per PSU connected, Per Port link speed

### POWER SUPPLY

PS Redundant (Y/N)/Quantity	DC 220 VDC PSUs MIL/COTS DC EMI POWER LINE FILTER
PS Input (AC/DC)	DC to DC
PS Input Voltage	220V
PS Efficiency	90%
PS Hot Swappable	No

### FAN

Fans Redundant/Quantity	NO/4
Fans Reversible (F-R, R-F)	F-R, R-F
Fans Hot Swappable	NO

### SOFTWARE

OCP Compliance	YES
Cumulus	3.7
ONIE support with version	ONIE-2019.05 and Upper
SONiC	201811 and upper
BMC support (Yes/No)	Yes (Optional)
BMC vender/family/model	ASPEED/AST2520

#### MECHANICAL

Rack-Mountable Width	19 inches
Dimension (W x D x H)	440 x 400 x89mm
Weight	6.2kg

### 3. Appearance

