

Cumulus Express

A WEB-SCALE NETWORKING SWITCH THAT COMES PRELOADED AND LICENSED WITH CUMULUS LINUX NETWORK OPERATING SYSTEM

Cumulus Express accelerates the move to web-scale networking with 1G to 100G data center switches. This simple, all-in-one approach to deployment delivers high performance web-scale networking efficiencies using a turnkey infrastructure.

The Cumulus Express switches are designed as high-performance data center Top-of-Rack (TOR) or spine switches. In a compact 1RU form factor, the switches provides line-rate L2 and L3 switching, supporting multiple speeds. Cumulus Express is a turnkey solution featuring an open networking switch preloaded and licensed with Cumulus Linux. As a ready-to-go solution, Cumulus Express improves time to deployment by eliminating steps to install the NOS and research optics, all while preserving the benefits of adopting web-scale networking.

Benefits

- ✓ **Access a one-stop shop for ordering and support**
- ✓ **Get help when you need it with a 3-year warranty**
- ✓ **Automate easily with standard tools**
- ✓ **Enjoy peace of mind with certified cables and optics**
- ✓ **Improve time to market with a turnkey solution**
- ✓ **Get up and running quickly**

Features

- Broadcom chipset
- Available in 1G-T, 10G/10G-T, 40G & 100G speeds
- Preloaded with Cumulus Linux and an active license key installed
- Full line-rate layer 2 or layer 3 support
- Cost-effective, open networking (ONIE) data center switch
- 3-year hardware warranty and customer support
- List of compatible cables and optics
- All ports on front. PSUs and fans inserted from rear
- Supports hot/cold aisle with port-to-power and power-to-port airflow SKUs
- Hot swappable, load-sharing redundant AC PSUs
- Hot-swappable fans modules
- Power efficient

FEATURING CUMULUS LINUX: THE MOST FLEXIBLE NETWORK OPERATING SYSTEM AVAILABLE

Cumulus Linux is the only network operating system that allows customers to affordably build and efficiently operate their networks like the world's largest data center operators — completely unlocking vertical network stacks. With a host of features, Cumulus Linux allows customers to build a highly scalable, flexible and agile modern data center.

- Automated installation and provisioning with ZTP
- Automated configuration changes
- Clos multi-layer spine architecture
- OCP compliant. Unparalleled flexibility with completely open system
- Easy standard or custom application portability
- Layer 3 - OSPF, VRF, BGP, ECMP and PIM
- Layer 2 - STP, MLAG, HTP
- Network virtualization with VMware NSX, Midokura
- Controller-less network virtualization with LNV or EVPN
- VXLAN active-active bridging with MLAG
- Rich and simple command line with a Network Command Line Utility (NCLU) for easy configuration and operation
- Automatic hourly, daily or monthly Snapshot capabilities and Rollback
- Management VRF
- Advanced troubleshooting and ease of use with Prescriptive Topology Manager

For more information about Cumulus Linux, visit cumulusnetworks.com.

Hardware Specifications

1G SWITCHES

MODEL	CX-1048-T-F-B	CX-1048-T-F-B-M	CX-1048-T-R-B	CX-1048-T-R-B-M	CX-1048-P-F-B
NUMBER OF PORTS	48x 1G				48x 1G (POE)
UPLINK	4x 10G SFP+				
AIRFLOW DIRECTION	Port-to-Fan		Fan-to-Port		
ASIC	Dual Helix4				
SWITCHING CAPACITY	128 Gbps				
FORWARDING RATE	191 Mpps				
MEMORY	2G				
SPI FLASH	8MB				
NAND FLASH	8G				
DIMENSIONS	17.32 x 13.77 x 1.71				
WEIGHT	11.86 lbs		12.19 lbs		14 lbs
POWER SUPPLY	2x 100-240 VAC at 50-60 Hz				
POE IEEE 802.3af (15W)			--		48
IEEE 802.3af (30W)			--		48
PoE POWER BUDGET			--		1650 W
MANAGEMENT QUICKSTART*	--	yes	--	yes	--

40G SWITCHES

MODEL	CX-6032-S-F-B	CX-6032-S-R-B
NUMBER OF PORTS	32x 40G QSFP+	
UPLINK	--	
AIRFLOW DIRECTION	Port-to-Fan	Fan-to-Port
ASIC	Trident II+	
SWITCHING CAPACITY	1.28 Tbps	
FORWARDING RATE	1.44 Bpps	
MEMORY	8G	
SPI FLASH	16MB	
NAND FLASH	8G	
DIMENSIONS	17.26 x 20.28 x 1.71	
WEIGHT	21.27 lbs	
POWER SUPPLY	2 x 90 to 264 VAC at 50-60 Hz	
POE IEEE 802.3af (15W)	--	
IEEE 802.3af (30W)	--	
PoE POWER BUDGET	--	
MANAGEMENT QUICKSTART*	--	

*Management Quickstart SKUs will have basic configuration applied and will ship with all front panel ports 'up'. All ports will belong to a common VLAN to allow immediate L2 forwarding on all ports following install.

10G SWITCHES

MODEL	CX-4048-S-F-B	CX-4048-S-R-B	CX-4048-T-F-B	CX-4048-T-R-B
NUMBER OF PORTS	48x 10G SFP+		48x 10G RJ45	
UPLINK	6x 40G QSFP+			
AIRFLOW DIRECTION	Port-to-Fan	Fan-to-Port	Port-to-Fan	Fan-to-Port
ASIC	Trident II+			
SWITCHING CAPACITY	1.44 Tbps			
FORWARDING RATE	1 Bpps			
MEMORY	8G			
SPI FLASH	16MB			
NAND FLASH	8G			
DIMENSIONS	17.4 x 18.6 x 1.71			
WEIGHT	19.73 lbs		20.94 lbs	
POWER SUPPLY	2x 90 to 264 VAC at 50-60 Hz			

100G SWITCHES

MODEL	CX-8032-S-F-B	CX-8032-S-R-B
NUMBER OF PORTS	32x 100G QSFP28	
UPLINK	--	
AIRFLOW DIRECTION	Port-to-Fan	Fan-to-Port
ASIC	Tomahawk	
SWITCHING CAPACITY	3.2 Tbps	
FORWARDING RATE	4.7 Bpps	
MEMORY	16G	
SPI FLASH	16MB	
NAND FLASH	8G	
DIMENSIONS	17.3 x 20.3 x 1.71	
WEIGHT	23 lbs	
POWER SUPPLY	2 x 90 to 240 VAC at 50-60 Hz	

ABOUT CUMULUS NETWORKS*

Cumulus Networks helps customers realize cost-effective, high capacity networking for modern data centers. Linux transformed the economics and innovation for data center compute, and Cumulus Linux is doing the same for the network. It radically reduces the costs and complexities of operating modern data center networks for businesses of all sizes. Cumulus Networks has received venture funding from Andreessen Horowitz, Battery Ventures, Sequoia Capital, Peter Wagner and four of the original VMware founders.

For more information visit cumulusnetworks.com, or follow [@cumulusnetworks](https://twitter.com/cumulusnetworks).

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