

**INTELLIPOINT DATA SHEET**

# 10G 48+6-Port Open Networking Switch + 100G Uplinks



Champion ONE open networking switch solutions pair high-performance, reliable hardware with feature-rich network operating system (NOS) software to provide greater flexibility and control at lower costs than traditional closed layer 2 and layer 3 Ethernet switches.

## Product Overview

Bolster your network with a carrier-grade 10G open networking switch from Champion ONE. This high-density solution provides full line-rate switching at Layer 2 or Layer 3 across 48 10GbE ports and 6 100GbE uplinks. These switches meet the high performance, availability, and network-scaling requirements of data centers, and can be deployed either as a Top-of-Rack switch or as part of a 40GbE or 100GbE distributed spine, forming a non-blocking folded CLOS data center fabric. The switch is mountable in either a standard 19" rack, or a 21" Open Rack via an Open Rack Switch Adapter.

This 10G switch is built on a Broadcom Qumran silicon chip. They come loaded with the Open networking Install Environment (ONIE) software installer, and can be bundled with industry-leading software including IP Infusion®. For more information, please refer to the "Software Compatibility" table on page 3.

## Technical Specifications

### PORT CONFIGURATION (FRONT OF SWITCH)

(48) 1/10GbE SFP+ ports  
 (6) 100GbE QSFP28 ports  
 Management ports on front panel:  
 (1) RJ-45 serial console  
 (1) RJ-45 100/1000BASE-T management  
 (1) USB type A storage port

### DIMENSIONS

Standard 19" Rack (WxDxH):  
 44cm x 54.8cm x 4.4cm); 8.5kg

### POWER SUPPLIES AND FAN TRAY (REAR)

Redundant, load-sharing power supplies, AC or -48VDC  
 AC: 90 to 240 VAC  
 DC: -36 to -72 VDC,  
 Hot-swappable fan tray with 5+1 redundant fans

### ENVIRONMENTAL

Operating Temp. Range: 0 to 40° C  
 Storage Temp. Range: -40 to 70° C  
 Humidity Range: 5% to 95%

### WARRANTY

All feature a limited 3-year warranty

### REGULATORY

EMI  
 CE Mark  
 EN55032 Class A  
 EN55024  
 EN61000-3-2  
 EN61000-3-3  
 FCC Part 15 Subpart B Class A  
 VCCI Class A  
 BSMI  
 CB  
 UL/CUL  
 NEBS Level 1  
 RoHS 2.0 Compliant  
 WEEE Directive 2002/96/EC

## Key Features Summary

- Cost-effective, bare-metal switch infrastructure for data center and carrier access
- 48 x SFP+ switch ports, supporting 10 GbE (DAC, AOC, 10GBASE-SR/LR) or 1 GbE (1000BASE-T/SX/LX)
- 6 x 100 QSFP28 switch ports, supporting 100GbE
- Expandable packet buffering for carrier access
- MPLS support for carrier access
- Layer 2 or Layer 3 forwarding of 800 Gbps
- Supports hot/cold aisle with port-to-power and power-to-port airflow SKUs
- All ports on front; PSUs, swappable 4+1 fan tray on rear
- Hot-swappable, load-sharing, redundant AC PSUs or -48VDC PSUs; or 12VDC power input
- Management: Ethernet and console RJ-45 ports; USB storage port
- Hardware switch pre-loaded with Open networking Install Environment (ONIE) for automated loading of compatible independent SwitchOS software
- For compatible software options and versions, please refer to the "Software Compatibility" table on page 3

## Performance Specifications

C1 Part Number <sup>1</sup>	Switching Capacity (Gbps)	Forwarding Rate (Bpps)	On-Chip Buffering	Deep DRAM Buffering	Jumbo Frames (bytes)	VLAN IDs <sup>1</sup>	MAC Address Table Size <sup>1</sup>	L3 Routes <sup>1</sup>
C1-10G-48+6-S-BQM-AF	800	1.6	16 MB	6 GB	9216	4 K	750 K	750 K (expandable to 8 million)

1. Subject to NOS restrictions.

## Silicon and Memory

Switch Silicon	Broadcom BCM88370 Qumran MX
CPU Module	Intel Rangeley C2538 quad-core 2.4GHz processor
Memory	8 GB SO-DIMM DDR3 RAM x2 32 GB mSATA

## Software Compatibility



Contact Champion ONE for specific version compatibility.

## Supported Optics

SFP+ Transceivers		
Standard	Max. Rated Distances	Passport Part #*
10GBASE-CU DAC	0.5m to 7m (passive and active)	10GSFP+E-DA01 10GSFP+E-DA03 10GSFP+E-DA05 10GSFP+E-DA07
10GBASE-SR/SRL	100m or 300m (OM3 MMF)	10GSFP+E-SR
10GBASE-LR	10km	10GSFP+E-LR 10GSFP+E27B10L (bi-di) 10GSFP+E3310L (bi-di)
1000BASE-SX	55m	1000SFP055
1000BASE-LX	10km	1000SFP10
1000BASE-T	100m	1000SFPT

QSFP+ Transceivers		
Standard	Max. Rated Distances	Passport Part #*
40GBASE-CR4 DAC	Up to 7m	40GQSFP+E-DA0x (x=1, 3, 5, 7)
40GBASE-CR4 / 4x10GBASE-CU DAC	0.5m to 7m	40GQ-4X10S-BO01 40GQ-4X10S-BO03 40GQ-4X10S-BO05
40GBASE-SR4	100m (OM3 MMF) 150 (OM4 MMF)	40GQSFP+E-SR4
40GBASE-LR4	10km	40GQSFP+E-LR4
100GBASE-SR4	70m (OM3) 100m (OM4)	100GQSFP28E-SR4
100GBASE-LR4	10km	100GQSFP28E-LR4
100G QSFP28 AOC	Up to 30m	100GQSFP28-AOxx (xx = 01, 03, 05, 10, 15, 20, 30)

## Ordering Information

PART NUMBER SCHEME:

# C1-10G-48+6-S-BQM-YZ

Y	Power Option
A	AC Power
48D	48VDC Power

Z	Airflow Option
F	Port-to-Power Airflow
B	Power-to-Port Airflow