

# 800G DATA CENTER SWITCH

AS9817-64O

The Accton AS9817-64O is an 800G high-performance switch platform for modern data center applications. The switch provides line-rate L2 and L3 switching across the 64 x 800 GbE OSFP800 ports, each supporting 2 x 400 GbE, 4 x 200 GbE, or 8 x 100 GbE via breakout cables. The AS9817-64O can be deployed as a super-spine switch supporting 100/200/400 GbE spine/leaf interconnects. This switch platform is loaded with the Open Network Install Environment (ONIE), which supports the installation of compatible Network Operating System (NOS) software, including the open source software Open Network Linux (ONL).



## Key Features

### Interfaces

- 64 x 800 GbE OSFP800 switch ports
- 2 x 25 GbE SFP28 switch ports

### Key Design

- Incorporates Broadcom Tomahawk 5 51.2 Tbps switch silicon
- Intel Ice Lake-D LLC CPU
- Hardware Root of Trust (ROT) and BMC

### Physical

- 2RU form factor
- All ports on front; modular design for PSUs and fans
- Hot-swappable, load-sharing, redundant 1+1 PSUs
- 3+1 redundant, hot-swappable fan modules

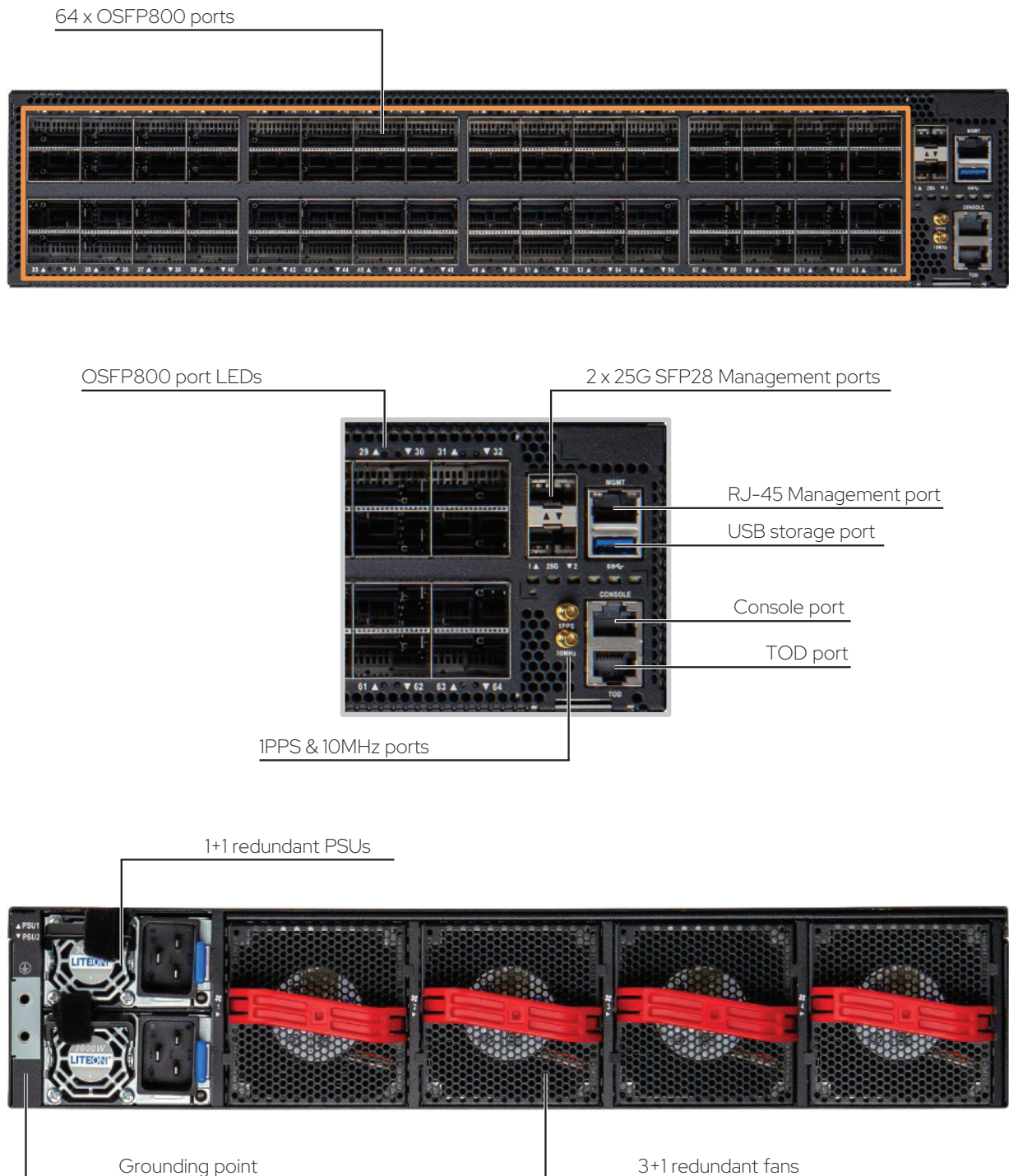
### Software

- Bare-metal hardware switch pre-loaded with diagnostic software and Open Network Install Environment (ONIE)

### Applications

- Data center spine, leaf, ToR switch
- Enterprise backbone/core switch
- Ethernet fabric for AI/ML cluster
- High power optics/ports support for DCI
- Large radix system for aggregation networks

## Overview



A decorative image of a single tree with orange-brown leaves on a grassy hill under a clear blue sky, positioned at the top left of the page.

# Specifications

## Ports

64 x 800G OSFP800 switch ports  
1 x RJ-45 UART RS232 console port  
1 x RJ-45 out-of-band management port  
2 x SFP28 in-band management ports  
1 x USB 3.0

## Key Components

Switch Silicon: Broadcom Tomahawk 5 (BCM78900) 51.2 Tbps  
multi-layer Ethernet switch controller  
CPU: Intel Ice Lake-D D1713NTE 4C Processor  
Memory: 16GB x 2 with ECC (SO-DIMM) DDR4  
Storage: M.2 240G NVMe SSD  
NOR Flash (Boot): 64MB  
NOR Flash (Backup): 64MB  
BMC: AST2600  
ROT: AST1060

## Timing and synchronization

Supports IEEE 1588 PTP and Synchronous Ethernet  
1 x 10MHz I/O SMB  
1 x 1pps I/O SMB  
1 x TOD RJ-45

## Physical and Environmental

Dimensions (WxDxH): 438.4 mm x 648.2 mm x 88 mm  
Fans: Hot-swappable 3 + 1 redundant fans  
Operating Temperature: 0°C – 40°C (32°F – 104°F)  
Operating Humidity: 5% – 95% non-condensing

## Software

Switch pre-loaded with Open Network Install Environment (ONIE)  
software installer

## Cooling

Front-to-back airflow (0°C – 40°C)  
Back-to-front airflow (0°C – 35°C)\*  
\*Subject to optics deployed.

## Power Supply

PSUs: 2 redundant, load-sharing, hot-swappable 3000 W AC/DC PSUs  
AC PSU:  
AC input rating:  
200–240 VAC at 50–60Hz (16 A/3000 W max.)  
AC PSU Inlet: IEC 60320 C20  
DC PSU:  
DC Input rating: –48 V ~ –60 V (80 A/3000 W max.)

## Regulatory

### EMI

CE Mark  
FCC Title 47, Part 15, Subpart B Class A

### Safety

CB EN60950, UL60950 EN62368, UL62368

## Environmental Parameters

Operating Temperature: 0°C – 40°C (32°F – 104°F) @ 6000 ft  
Operating Humidity: 5% – 95% non-condensing  
RoHS-2.0 compliant  
Electrical and Electronic Equipment (WEEE Directive 2002/96/EC)



# Ordering Information

## AC SKUs. Front-to-Back Airflow.

| Model Number           | Part Number   | PSU          | Airflow       | Power Cord |
|------------------------|---------------|--------------|---------------|------------|
| AS9817-64O-SCM-AC-F-US | FP6ZZ9664402A | Dual AC PSUs | Front-to-Back | US         |
| AS9817-64O-SCM-AC-F-EU | FP6ZZ9664201A | Dual AC PSUs | Front-to-Back | EU         |
| AS9817-64O-SCM-AC-F-UK | FP6ZZ9664301A | Dual AC PSUs | Front-to-Back | UK         |
| AS9817-64O-SCM-AC-F-JP | FP6ZZ9664501A | Dual AC PSUs | Front-to-Back | JP         |

## AC SKUs. Back-to-Front Airflow.

| Model Number           | Part Number   | PSU          | Airflow       | Power Cord |
|------------------------|---------------|--------------|---------------|------------|
| AS9817-64O-SCM-AC-B-US | FP6ZZ9664404A | Dual AC PSUs | Back-to-Front | US         |
| AS9817-64O-SCM-AC-B-EU | FP6ZZ9664203A | Dual AC PSUs | Back-to-Front | EU         |
| AS9817-64O-SCM-AC-B-UK | FP6ZZ9664303A | Dual AC PSUs | Back-to-Front | UK         |
| AS9817-64O-SCM-AC-B-JP | FP6ZZ9664503A | Dual AC PSUs | Back-to-Front | JP         |

## DC SKU. Front-to-Back Airflow

| Model Number | Part Number | PSU | Airflow | Power Cord |
|--------------|-------------|-----|---------|------------|
|--------------|-------------|-----|---------|------------|

|                    |               |              |               |    |
|--------------------|---------------|--------------|---------------|----|
| S9817-64O-SCM-DC-F | FP6ZZ9664012A | Dual DC PSUs | Front-to-Back | NA |
|--------------------|---------------|--------------|---------------|----|

## PSU FRUs ( No Power Cord is Included)

| Model Number   | Part Number   | PSU | Airflow       |
|----------------|---------------|-----|---------------|
| PSU-AC-3000W-F | FOOZZ9664001A | AC  | Front-to-Back |
| PSU-AC-3000W-B | FOOZZ9664003A | AC  | Back-to-Front |
| PSU-DC-3000W-F | FOOZZ9664004A | DC  | Front-to-Back |
| PSU-DC-3000W-B | FOOZZ9664005A | DC  | Back-to-Front |

## Fan FRUs

| Model Number  | Part Number   | Airflow       |
|---------------|---------------|---------------|
| FAN-2U-1x1F-B | FOOZZ9664002A | Front-to-Back |
| FAN-2U-1x1B-F | NA            | Back-to-Front |

## Rack-Mount Kit

| Model Number    | Part Number   | Description       |
|-----------------|---------------|-------------------|
| RKIT-2RU-SLIDE  | FOTZZ9664002A | Rail Kit          |
| RKIT-2RU-RSLIDE | FOTZZ9664001A | Reversed Rail Kit |