

A photograph of a tall, dark blue server rack filled with Arista 7800 Series network switches. The switches are stacked vertically, and the rack is set against a background of a server room with other racks visible in the distance.

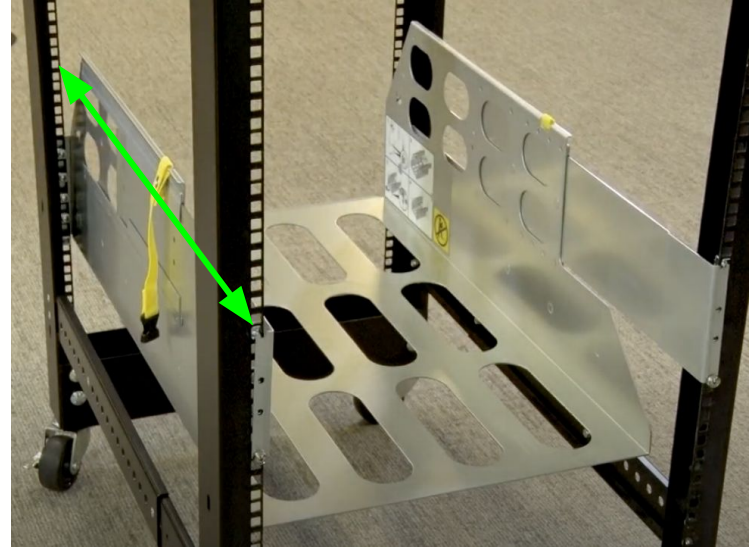
# Arista 7800 Series Familiarization

November 2024

78-0002-04

# 7800 Rack Mount Kits

- All systems ship with an accessory kit
  - Default accessory kit designed for extended rack depth
- Standard depth orderable as an option item
- For kit contents visit:



PART	DESCRIPTION	RACK INSTALLATION DEPTH
KIT-78xx*	Complete accessory kit for a 7800 system (included by default with any shipped bundle or chassis)	32.4 to 42.1" (82.3 to 107 cm)
KIT-7800-RK	Standard depth cradle, screws and cage nuts	23.9 to 33.6" (60.6 to 85.5 cm)
KIT-7800-RK-L	Extended depth cradle, screws and cage nuts	32.4 to 42.1" (82.3 to 107 cm)

\* xx should be replaced by 04, 08, 12, 16 or 16L when ordering

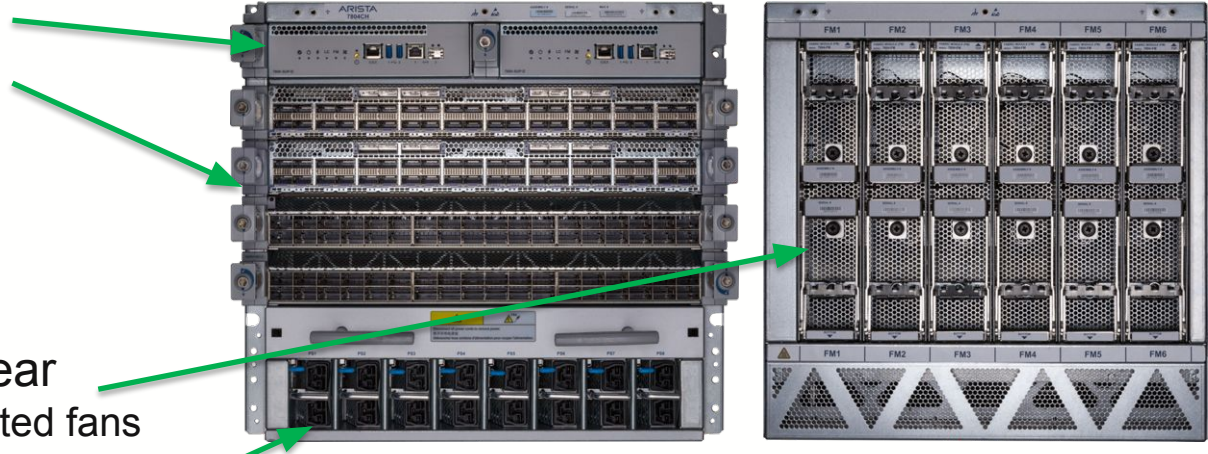
# 7804 At a Glance



	7804
Height	10RU
Max Power (N+N)	AC 24,000W DC 24,000W
Depth	37" (94cm)
Input Power	AC, DC, HVDC
Supervisors	2
Line cards	4
Power Redundancy	Grid and PSU
Power Supply Slots	8
Power Connectors	Dual inputs

# Arista 7804 System

- 2 Supervisor Modules
- 4 Line card Slots
- Front to Rear Airflow
- 6 Fabric Modules on rear
  - Fabrics contain integrated fans
- 8 Power Supply slots
  - AC, DC or HVDC PSUs
  - Default 6 AC PSU, 12 power cords

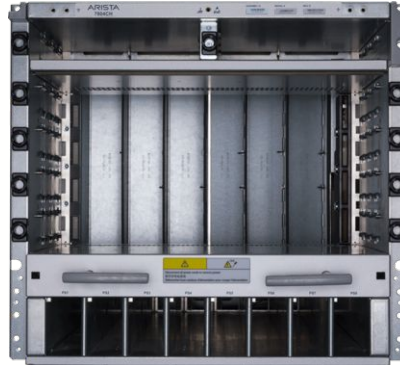


# 7804-CH

Front w/ Blanks



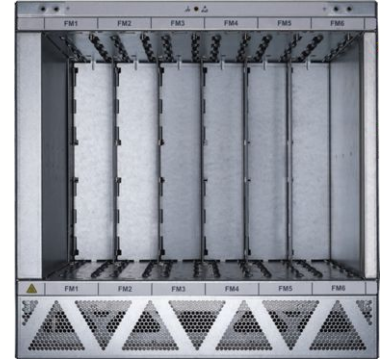
Front Empty



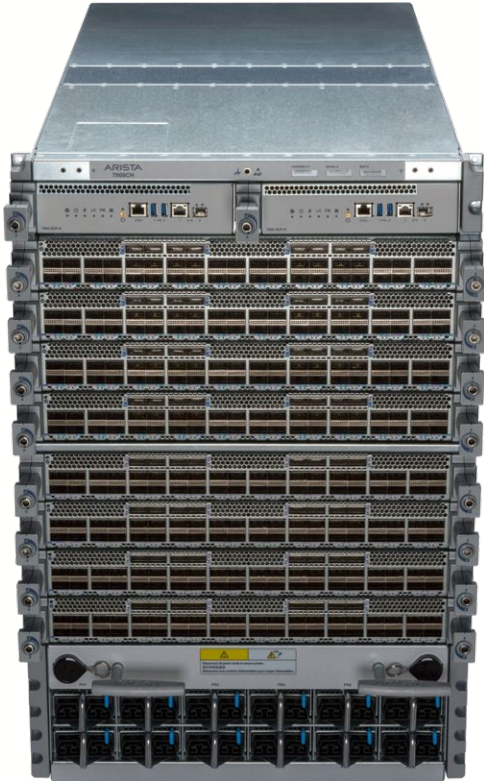
Rear + Fabrics



Rear Empty



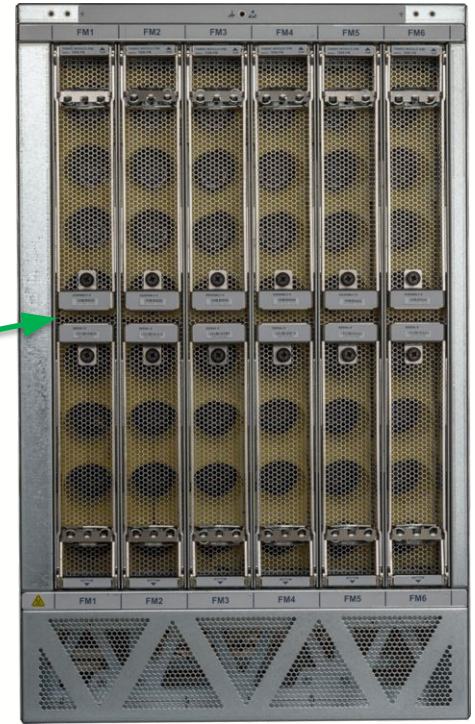
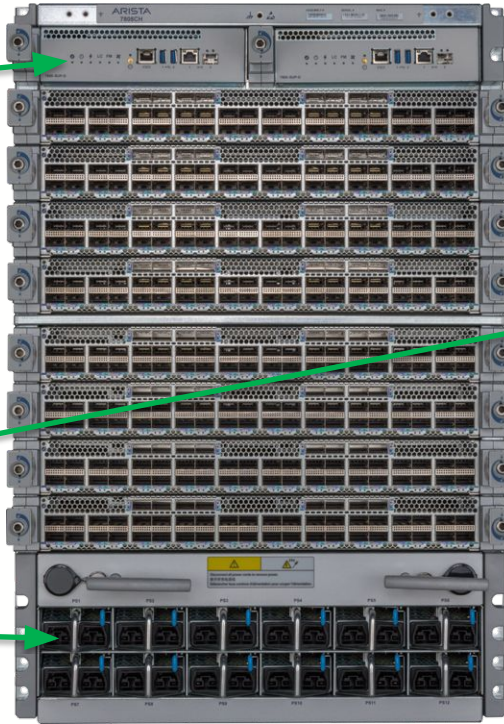
# 7808 At a Glance



	7808
Height	16RU
Max Power (N+N)	AC 36,000W DC 36,000W
Depth	37" (94cm)
Input Power	AC,DC, HVDC
Supervisors	2
Line cards	8
Power Redundancy	Grid & PSU
Power Supply Slots	12
Power Connectors	Dual input PSUs

# Arista 7808 System

- 2 Supervisor Modules
- 8 Line card Slots
- Front to Rear Airflow
- 6 Fabric Modules on rear
  - Fabrics contain integrated fans
- 12 Power Supply slots
  - AC, DC or HVDC PSUs
  - Default 8 AC PSU, 16 power cords



# 7808-CH

Front w/ Blanks



Front Empty



Rear + Fabrics



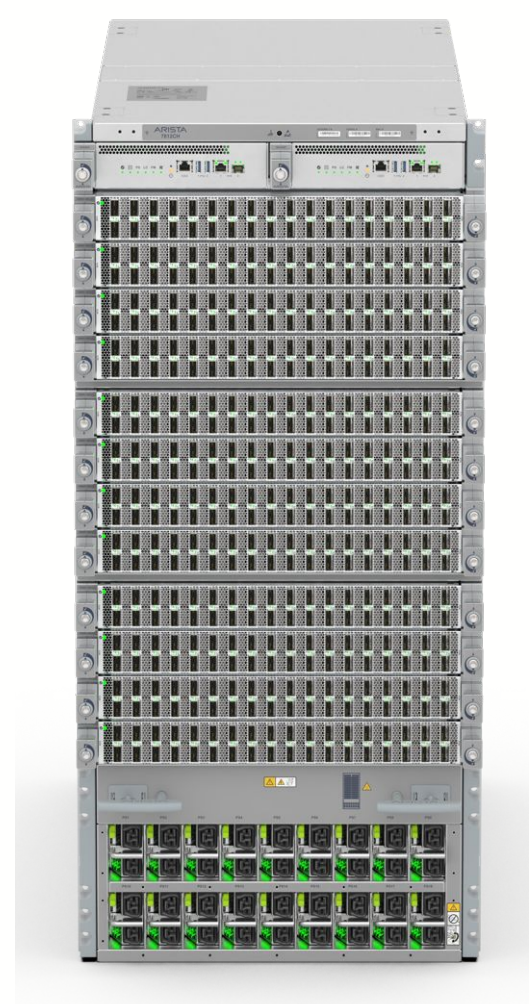
Rear Empty





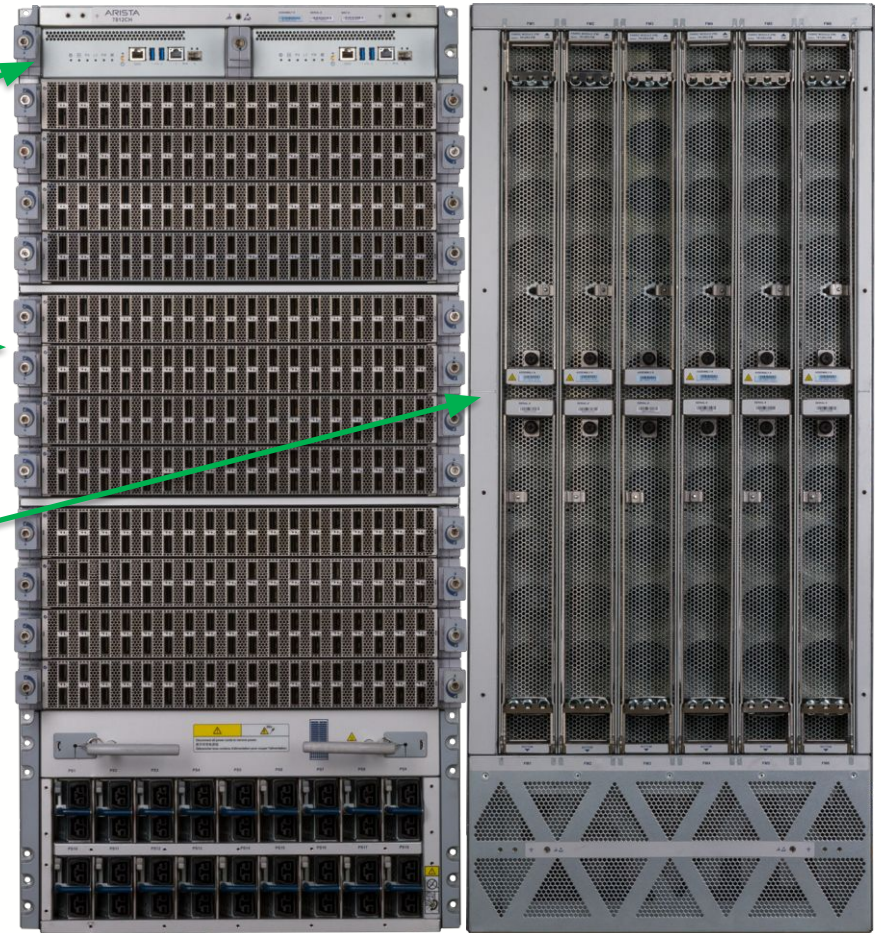
# 7812R3 System At a Glance

	7812
Height	23RU
Max Power (N+N)	AC 54,000W DC 54,000W
Depth	37" (94cm)
Input Power	AC,DC, HVDC
Supervisors	2
Line cards	12
Fabric Modules	6
Power Redundancy	Grid and PSU
Power Supply Slots	18
Power Connectors	Dual inputs



# 7812-CH

- 2 Supervisor Modules
- 12 Line card Slots
- Front to Rear Airflow
- 6 Fabric Modules on rear
  - Fabrics contain integrated fans
- 18 Power Supply slots
  - AC, DC or HVDC PSUs
  - Default 10 AC PSU, 20 power cords



# 7816R3 System At a Glance

	<b>7816</b>
Height	32RU
Max Power (N+N)	AC 72,000W DC 72,000W
Depth	40" (101.6cm)
Input Power	AC,DC, HVDC
Supervisors	2
Line cards	16
Fabric Modules	12
Power Redundancy	Grid + PSU
Power Supply Slots	24
Power Connectors	Dual inputs

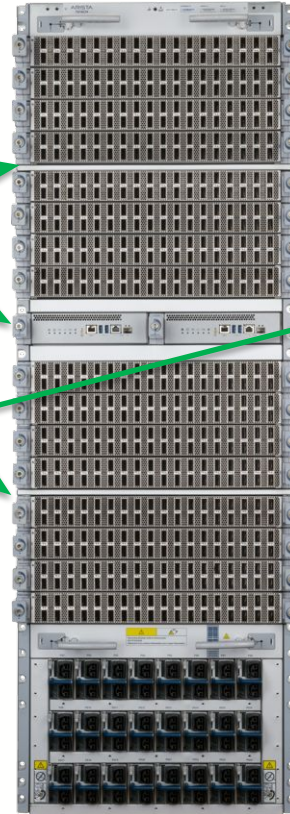


# 7816R3 System

Front w/ Modules

Rear + Fabrics

- 2 Supervisor Modules
- 16 Line card Slots
- Front to Rear Airflow
- 12 Fabric Modules on rear
  - Fabrics contain integrated fans
- 24 Power Supply slots
  - AC, DC or HVDC PSUs
  - Default 12 AC PSU, 24 power cords



# 7816-CH

Front Empty

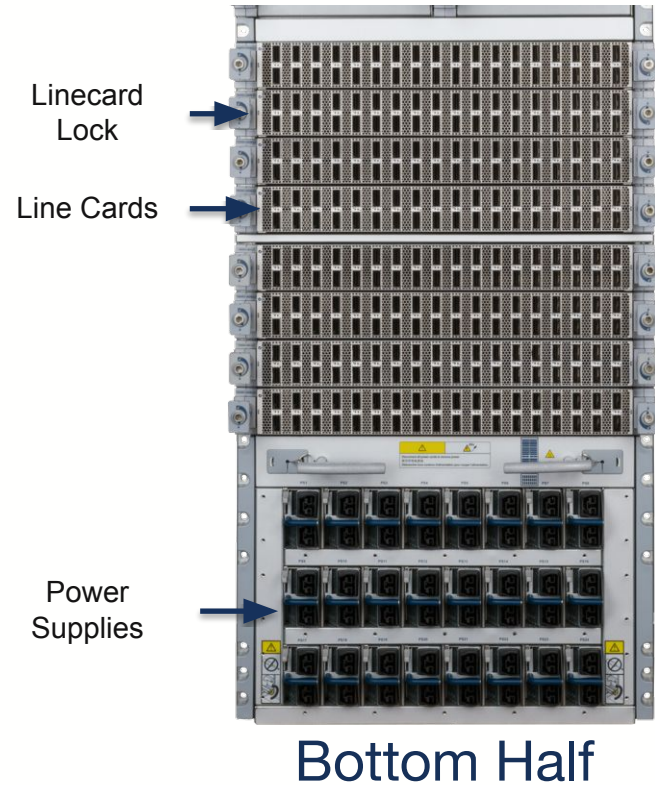
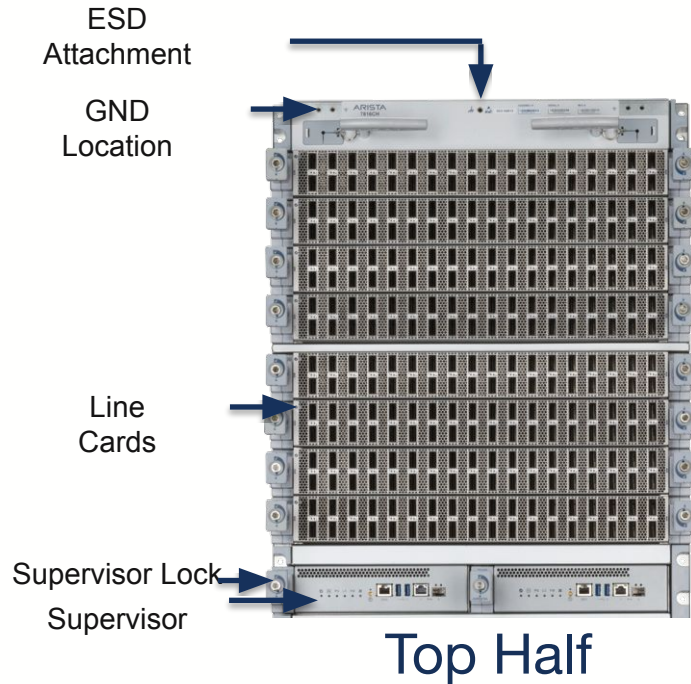


Rear Empty



# 7816R3 Front – Fully Populated Components

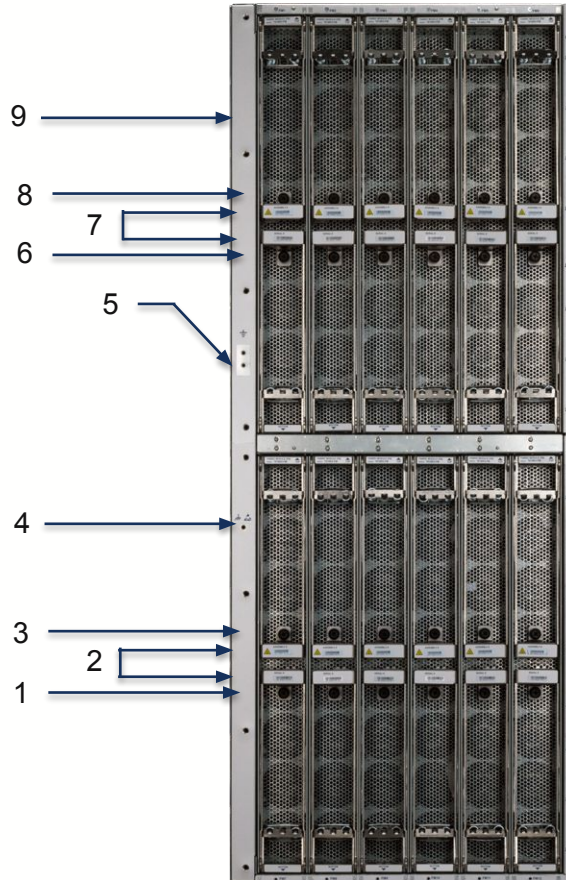
- 16 Line card slots
- Dual Supervisors – 7816-SUP
- 24 Power Supply Slots



# 7816R3 Rear – Fully Populated

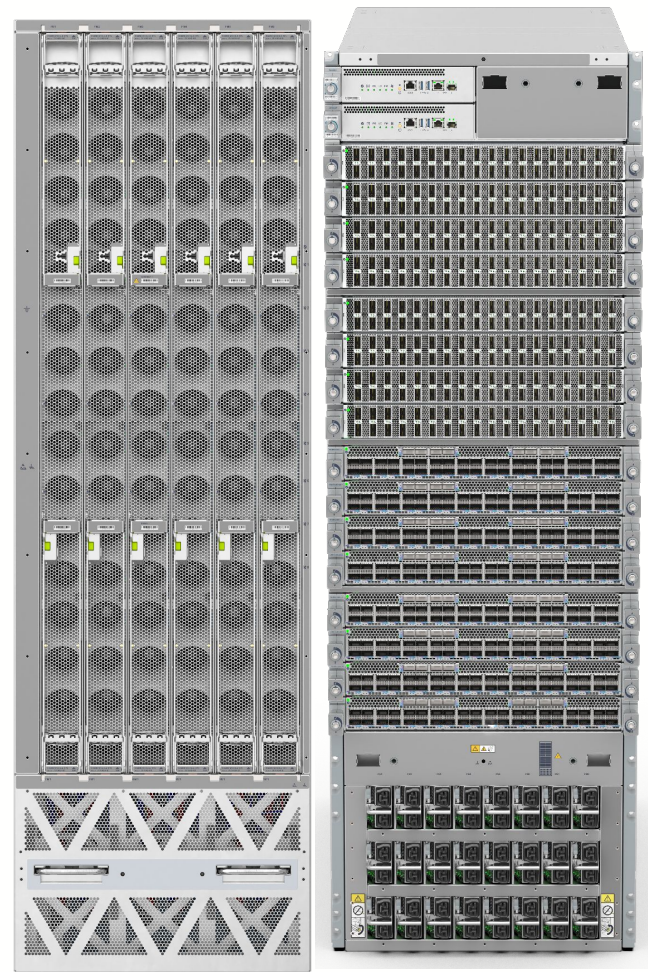
- 12 Fabric Modules
  - Hot swap FRU
  - 6 in Upper
  - 6 in Lower
  - System requires 12 fabric modules to operate
  - Integrated fan modules
  - Front to Rear (ports to fabric) airflow

1, 3, 6 & 8 Fabric Module Screws  
2 & 7 Fabric Module Release handle  
4 & 9 Fabric Modules  
5 ESD attachment point



# 7816LR3 System At a Glance

	<b>7816</b>
Height	32RU
Max Power (N+N)	AC 72,000W DC 72,000W
Depth	37"
Input Power	AC, DC, HVDC
Supervisors	2
Line cards	16
Fabric Modules	6
Power Redundancy	N+2
Power Supply Slots	24
Power Connectors	Dual inputs



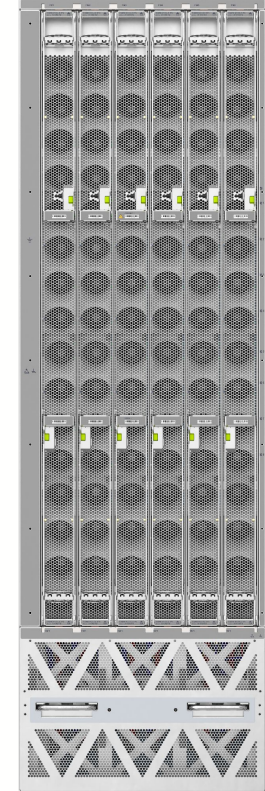
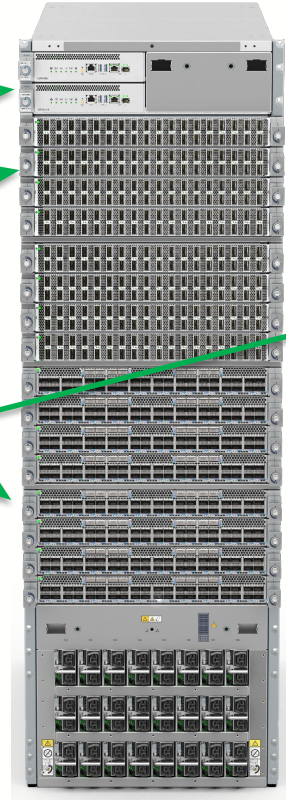


# 7816LR3 System

Front w/ Modules

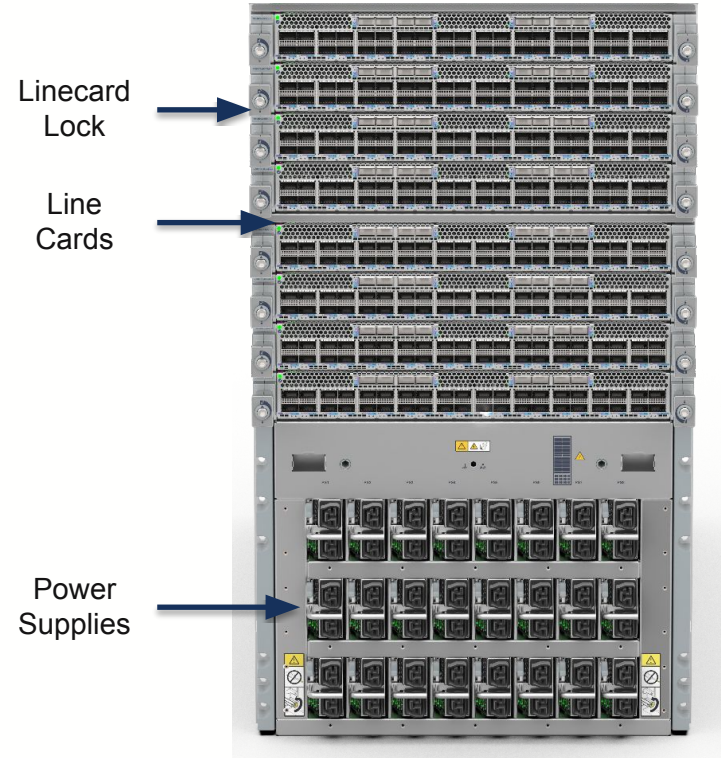
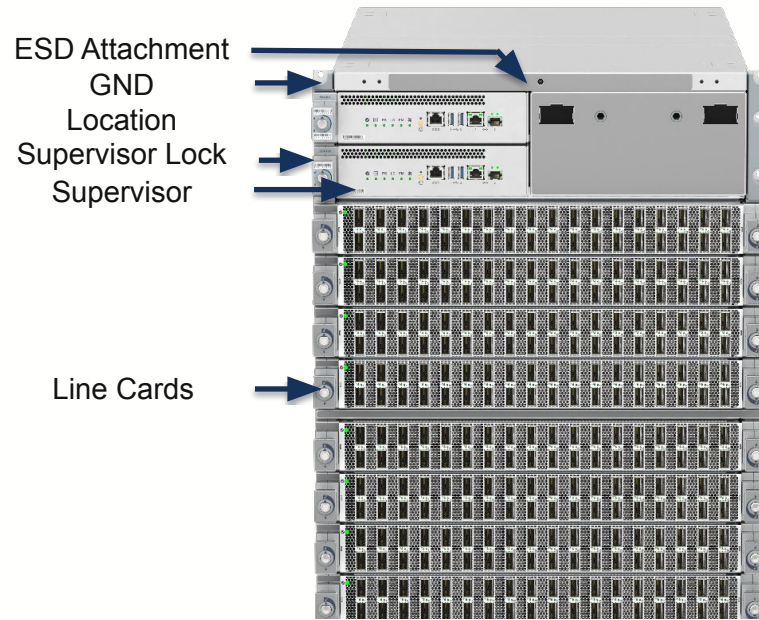
Rear + Fabrics

- 2 Supervisor Modules
- 16 Line card Slots
- Front to Rear Airflow
- 6 Fabric Modules on rear
  - Fabrics contain integrated fans
- 24 Power Supply slots
  - AC, DC or HVDC PSUs
  - Default 12 AC PSU, 24 power cords



# 7816LR3 Front – Fully Populated Components

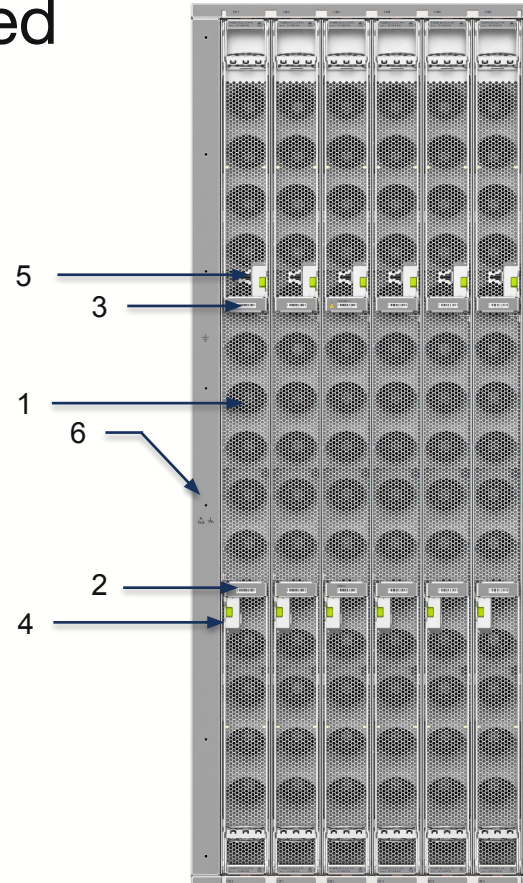
- 16 Line card slots
- Dual Supervisors – 7816-SUP
- 24 Power Supply Slots



# 7816LR3 Rear – Fully Populated

- 6 Fabric Modules
  - Hot swap FRU
  - System requires 6 fabric modules to operate
  - Integrated fan modules (field replaceable)
  - Front to Rear (ports to fabric) airflow

1 Fabric Module  
2 & 3 Fabric Module Release handle  
4 & 5 Handle Release button  
6 ESD attachment point



# 7800R Series Supervisors

- CPU: Intel Broadwell DE 6-Core @ 1.9GHz, with 64GB DRAM (16GB x 4)
  - DCS-7816-SUP (for 7812 and 7816 models) uses 8-Core @ 2.0GHz
- Storage: 4GB Flash and 256GB SSD (2280 M.2 SSD)
- Dual USB Ports
- Dual Ethernet Management Ports – 10/100/1000 RJ45 / 1G SFP
- External clock input – mini coax connector
- Status LEDs – Status, Active, Line card, Fabric, Power, Fans



Status LEDs

USB

SFP

Mgmt

RJ45



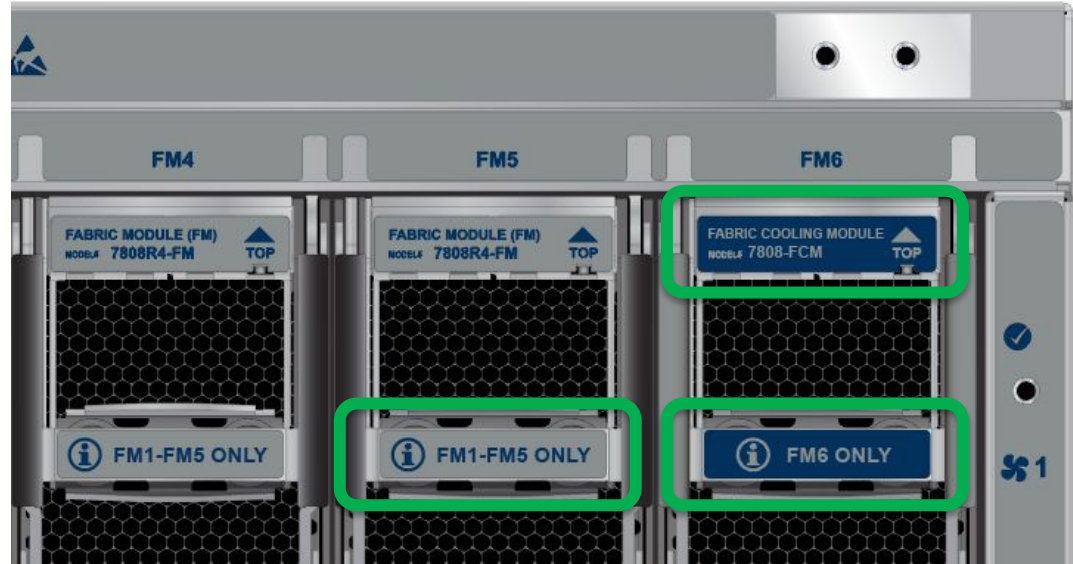


# 7800R4 Series

# 7800R4 Series Fabric Architecture

## R4 Series Uses 5 Fabric Modules

- Fabric Modules **only** in slots 1-5
  - 7804/7808/7812/7816L
- Slot 6 reserved for cooling module
  - FCM = Fabric Cooling Module
  - FCM is required for operation
- FMs and FCMs color coded
  - Labels identify the correct slots



# 7800R4 Series Fabric Architecture



Fabric Module



Fabric Cooling Module



# Thank You

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