SMART AGGREGATION SWITCH

ONS-S8



The robust OT network

The Smart Aggregation Switch is designed specifically for deploying Operational Technology networks in intelligent buildings. It connects up to 256 edge switches and allows users to centrally monitor and manage their entire network from the OneView™ Dashboard. The Smart Aggregation Switch supports all protocols in use for security, building automation, and IoT, and is easily set up for redundancy with its auto-switching Active/Protect feature.

A flexible backbone

Optigo Connect $^{\text{TM}}$ is designed with flexibility in mind. Passive Optical Networking enables redundant topologies that fit any building – from high-rises to data centers, shopping malls, and more. Choose the topology that minimizes cabling, puts edge switches at the edge, and leaves space for growth.

Prepare for the future

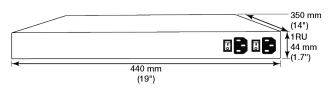
A flexible building network ensures the network can evolve over time. Buildings change with new technology and tenant requests. Optigo ConnectTM ensures the system has the bandwidth and ports to support the entire life of the building without adding to the construction cost. Edge devices can be added to an open port, or switches can be replaced with a larger one to provide more ports. Avoid pulling additional cable through minimal conduit space: simply split the fiber and continue expanding the network. An Optigo ConnectTM network is prepared for the future, no matter how uncertain it is.

Reduce costs

Optigo Connect requires less equipment, less space, and less cabling than traditional solutions, saving labour costs and money. The Smart Aggregation Switch (ONS-S8) works with the Network Controller (ONS-NC600) to quickly configure the network from Optigo OneView™. Configuring each switch for management, assigning ports the correct VLANs, and optimizing for security is reduced from days to a few minutes.

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ONS-S8 Smart Aggregation Switch



Dimensions and Power Connections

Product highlights

MGMT Port

- Supports all protocols in use for building automation, security, and IoT.
- Innovative redundancy of head end, fiber, and power supply achieved with auto-switching Active/Protect.
- Centrally manage the entire network with the Network Controller and Optigo OneView™.
- Plug-and-play simplicity allows for quick and easy installation and provisioning.
- Create a single virtual switch to filter, search, and bulk change parameters, all in one place.

Debug Ports

To connect to the To connect to a Serial **ONS-S8** ports and connections **ONS-NC600 Network** Port via included Controller. debug cable. 🔥 OPTIGO **Optical PON Ports** Ethernet SFP Ethernet **Ethernet Reset Button** Must use ONS-SX-SFP to To power cycle **Ports RJ45 Ports** SFP+ Ports connect ONS-S8 to Edge or factory reset Use ONS-DX-1G-SFP To connect to Use ONS-DX-Switches via Optical ONS-S8. to connect to BMS, BMS, VMS, Uplink. 10G-SFP to Splitters. VMS, Uplink. connect to BMS, VMS, Uplink.

ONS-S8 Smart Aggregation Switch Specifications

PORTS		
EPON	8 × 1 Gbps, EPON SFP	
RJ45 ETHERNET	3 × 10/100/1000 Mbp	
SFP ETHERNET	4 × 1 Gbps, SFP	
SFP+ ETHERNET	4 × 10 Gbps, SFP+	
BACKPLANE CAPACITY	112 Gbps	
MANAGEMENT PORT	Port 8 reserved for management	
ACC	Functionality reserved	
PHYSICAL CHARACTERISTICS		
LED STATUS INDICATORS	Power, Alarm, and Link	
POWER	100–240 VAC 58 W max Dual Redundant Power Supplies	
OPERATING ENVIRONMENT	0°C ~ 50°C (32°F ~ 122°F) 5–90% Humidity (non-condensing)	
DIMENSIONS	440 mm × 296 mm × 44 mm (17" × 12" × 1RU)	
WEIGHT	4.5 kg (9.9 lb)	
MOUNTING	Rack (brackets included)	
CERTIFICATIONS	CE, FCC, RoHS	
WARRANTY	3 years	

NETWORKING FEATURES	
EPON STANDARD	IEEE 802.3ah GEPON, 1 Gbps bidirectional, 1310/1490 nm
FIBER SUPPORT	Single-strand, Single-mode Optical Fiber OS1/OS2 9/125 µm, up to 20 km (12.5 miles) reach
SYSTEM SCALING	Up to 256 Edge Switches, 4096 ports
EPON PORT	SFP insert SC/UPC female
MTU	2000 bytes
802.1Q VLAN	4K VLANs – Configurable for each port in Trunk or Access mode

Ordering Information

AC power cable and rack mounting brackets included.		
Network Controller should be ordered separately.	ONS-NC600 is required for network management.	
SFP (Small Form-factor Pluggable) optics must be ordered separately.	ONS-SX-SFP for OPT ports (ONS-S8 only)	
	ONS-DX-1G-SFP for D ports	
	ONS-DX-10G-SFP for 10G D ports (SFP+)	
Please order either 1 or more ONS-SX-SFPs for each Aggregation Switch.	At least 1 SFP is required for operation.	
	Up to 8 SFPs are required to use all of the Optical Ports. This provides more bandwidth and allows more flexibility in network design.	
	Additional ONS-SX-SFPs may be ordered as spares.	

