

### The power behind your OT network

The Aggregation Switch for Optigo Connect Spectra is designed specifically for deploying Operational Technology networks in intelligent, fiber-based buildings. It connects up to 256 Edge Switches and allows users to centrally monitor and manage their entire network from the Optigo OneView™ dashboard. The Aggregation Switch supports all Ethernet-based 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™ is designed with flexibility in mind. Passive Optical Networking on fiber networks 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.

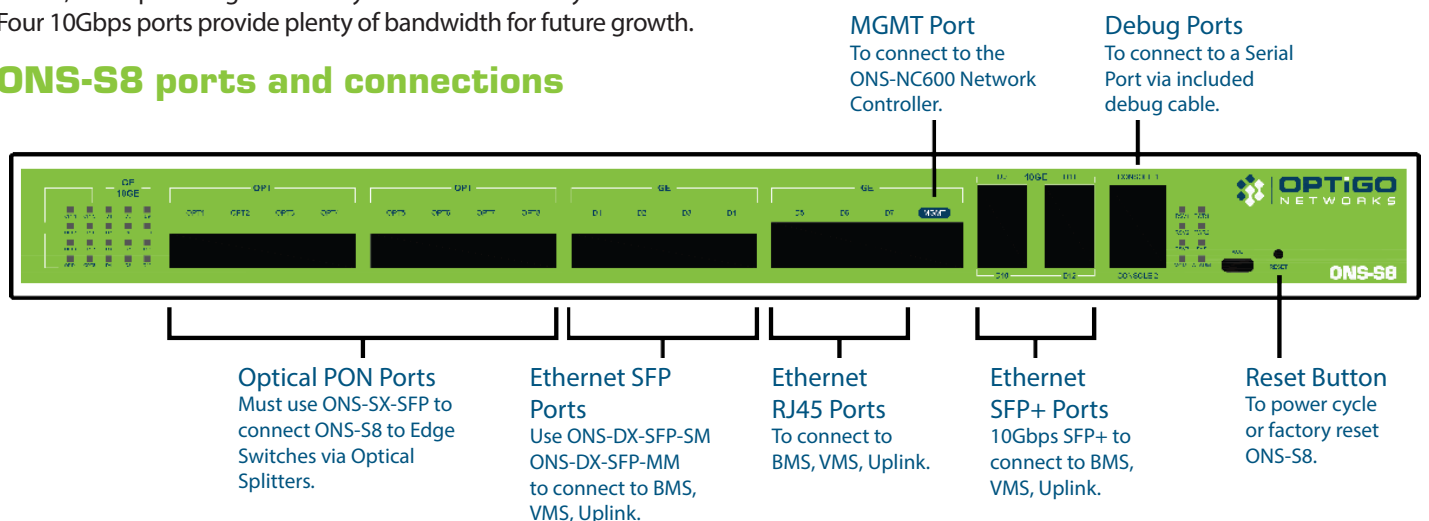
#### Prepare for the future

A flexible building network allows the network to evolve over time. Buildings change with new technology and tenant requests. Optigo Connect™ 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 Connect™ network is prepared for the future, no matter how uncertain it is.

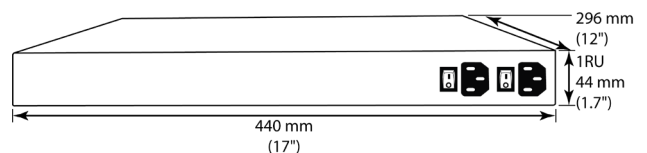
#### Reduce costs

Optigo Connect™ requires less equipment, less space, and less cabling than traditional solutions, saving labour and hardware costs. The 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. Four 10Gbps ports provide plenty of bandwidth for future growth.

### ONS-S8 ports and connections



ONS-S8  
Spectra Aggregation Switch



Dimensions and Power Connections

### Product highlights

- Perfect for converged OT networks with security, BAS, and IoT systems.
- 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.

# ONS-S8 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	FCC, RoHS, CE
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-SFP-SM and ONS-DX-SFP-MM
Please order either 1 or more ONS-SX-SFPs for each Aggregation Switch.	At least 1 ONS-SX-SFP is required for operation. Up to 8 ONS-SX-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.

Note that the Spectra Aggregation Switch (ONS-S8) is used on the Optigo Connect Spectra solution. For an Optigo Connect Hybrid solution with copper Ethernet, multi-mode, or mixed cabling, specific Optigo Edge Switches (ONS-Cx) are substituted as the Aggregation Switch. In either solution, the Network Controller (ONS-NC600) allows users to connect to Optigo OneView to manage their network.

For more information, please refer to the Optigo Connect Hybrid Solution Datasheet, and the Optigo Edge Switch Datasheet, available at [optigo.net/tech-spec-sheets](http://optigo.net/tech-spec-sheets)