



## VERSATILE CONNECTIVITY

Alta Labs offers three PoE+ Gigabit switches, designed to meet various needs ranging from an enterprise environment to the small office/home office. The S24-PoE is a rackmountable switch with twenty-four 10/100/1000 ports, sixteen of which support PoE+. The S24-PoE includes two SFP+ ports. The S16-PoE is a rackmountable switch with sixteen 10/100/1000 ports, eight of which support PoE+. The S16-PoE includes two SFP ports. The S8-PoE is a compact switch with eight 10/100/1000 ports, four of which support PoE+. It can be placed on a desktop or mounted on a wall. All of the Alta Labs switches include Bluetooth functionality for seamless device setup.

	S8-POE	S16-POE	S24-POE
Total Ports	8	16	24
PoE+ Ports	4	8	16
PoE Budget	60	120	240
SFP/SFP+	-	Up to 1 Gbps	Up to 10 Gbps
Bluetooth	✓	✓	✓

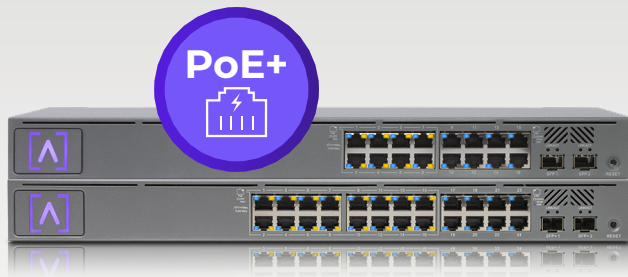
## FEATURES

- Power Over Ethernet
- SFP/SFP+ High Performance Connectivity
- Bluetooth Setup
- Mobile App
- Scalable Cloud-Based Management
- VLAN Stacking
- Egress and Ingress Rate Limiting
- IGMP Snooping
- 802.1X Authentication
- Network Loop Detection\*
- Customizable Dashboard
- Status Snapshots
- Device Cards
- Site Manager
- Mounting Flexibility
- More Features to Come with Automatic Firmware Updates

\* Coming Soon via future firmware release

### Power Over Ethernet

The Alta Labs switches feature PoE+ connectivity with a number of ports capable of providing up to 30 Watts of power per port. The switches support the 802.3at PoE+ standard and are backwards compatible with the 802.3af PoE standard. The S8-PoE offers four PoE+ ports with a PoE budget of 60 Watts. The S16-PoE offers eight PoE+ ports with a PoE budget of up to 120 Watts. The S24-PoE offers sixteen PoE+ ports with a PoE budget of up to 240 Watts. Power your Alta Labs Access Points and other devices that support 802.3at or 802.3af standards.



### SFP/SFP+ High Performance Connectivity

The S24-PoE switch provides two SFP+ ports for high-capacity fiber or copper connections of 1 Gbps, 2.5 Gbps, 5 Gbps, or 10 Gbps. The S16-PoE switch provides two SFP ports for fiber or copper connections up to 1 Gbps.



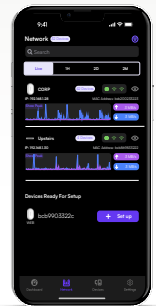
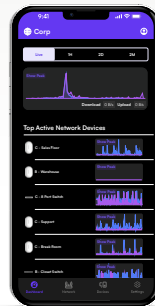
### Bluetooth Setup

The Alta Labs switches include Bluetooth functionality allowing for seamless setup using the Alta Labs mobile app.



### Mobile App

Monitor and manage your networks from the convenience of your mobile device. The management interface is easily accessible via mobile app or web browser. Sign up for an Alta Labs account using just your name, email, and password or sign in using your Google or Apple account.



## Scalable Cloud-Based Management

Alta Labs provides an intuitive and easy-to-use cloud-based management interface for Alta Labs access points and switches. Designed for optimum scalability using a high-availability architecture for the ultimate in convenience and worldwide accessibility. Built on a worldwide content delivery network to optimize response and latency, our global cloud infrastructure ensures geographically optimized connectivity through our redundant network.

Deploy and manage multiple sites quickly and easily. Add, delete, or rename sites instantly. Toggle between sites from a site selection drop-down. Each site contains its own data set.



## Advanced Features

Join our community of users at [forum.alta.inc](http://forum.alta.inc) to brainstorm innovative uses of advanced features via our command line interface.

### VLAN Stacking

As one of our advanced features, the S24-PoE supports VLAN stacking, or Q-in-Q, to provide your customers (and their customers) with their own subsets of VLANs.

## Egress and Ingress Rate Limiting

The switches offer egress and ingress rate limiting. This allows inbound and outbound traffic to be limited to a portion of the available bandwidth per connection.

For example, a hotel may want to provide guests with free 5 Mbps internet download (egress) connections but require guests pay an extra fee for 100+ Mbps speeds. The upload (ingress) speeds from the guests devices can also be limited.



## IGMP Snooping

IGMP Snooping functionality is incorporated into Alta Labs switches to optimize network performance by reducing unnecessary traffic. This is particularly helpful for IPTV or multicast video streams.

## 802.1X Authentication

Alta Labs switches support 802.1x Authentication to allow for more dynamic methods of network authentication. VoIP phones and other 802.1x-compliant hardware can authenticate themselves on to the network, helping with deployment on larger networks.

## Coming Soon via Firmware Update

### Network Loop Detection

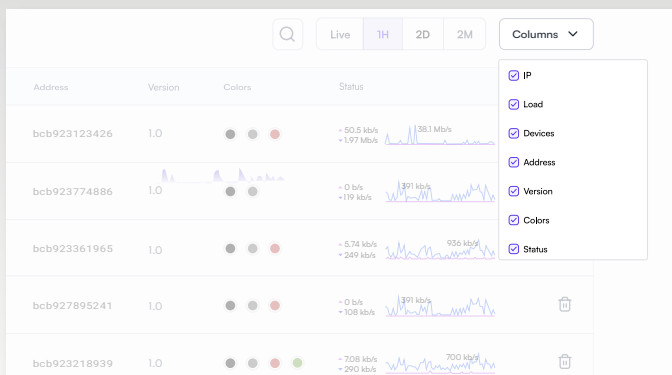
Network loops can deteriorate performance or even cause network failure. Our built-in network loop detection functionality is designed to help you eliminate any potential network loops.

## Alta Labs Cloud Management Platform

The Alta Labs Cloud Management Platform provides many features that can be utilized on your Alta Labs Switches.

### Customizable Dashboard

Customize your dashboard with the information you want to see: IP address, Load, number of devices, MAC address, firmware version, network color assignment, and real-time status details. Details are sortable by column.

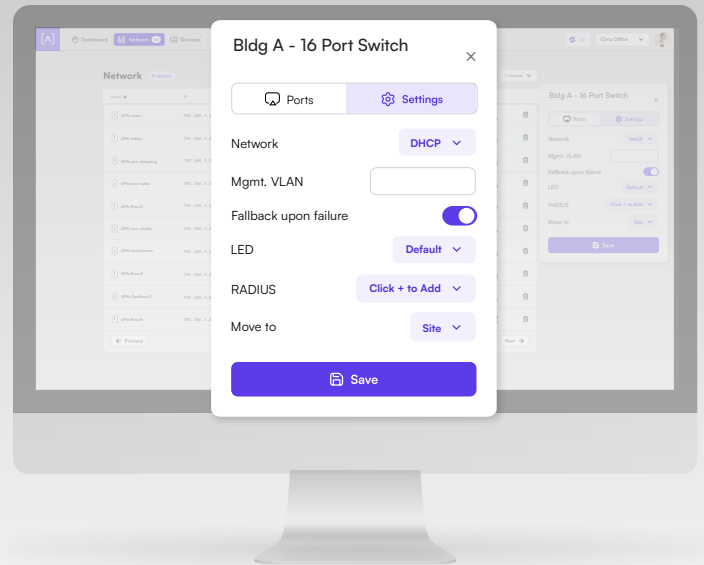


### Status Snapshots

View upload and download throughput with a visual timeline on the dashboard for each device displayed along with the number of connected devices, average processor load, channel load, and average connected devices. Select a snapshot of the last minute, last hour, last two days, or last two months.

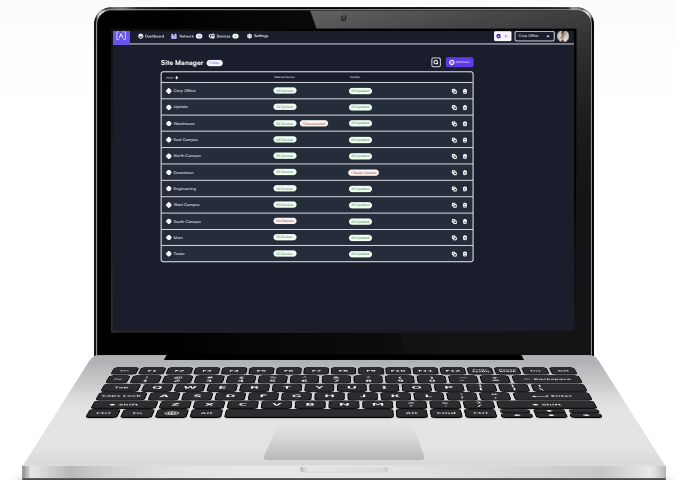
## Device Cards

Easily view connection details and configure your ports by clicking the device icon.



## Site Manager

The Alta Site Manager provides an overview of all sites, displays the number of devices for each site, and shows when updates are needed. New sites can be added and current sites can be duplicated or removed. Use the search option to look for a specific site.



## SPECIFICATIONS

MECHANICAL	
Dimensions	25.7 x 91 x 180 mm (1 x 3.6 x 7.1")
Weight	.38 kg (.83 lbs)
Material Type	Injection Molded Plastic
Material Finish	Matte
Color	White

PORTS	
Interface ports	(8) 10/100/1000 Mbps
SFP/SFP+	None
Switching Capacity	16 Gbps
Non-blocking Throughput	8 Gbps
Forwarding Rate	11.9 Gbps
PoE Budget/Max	60 Watts
PoE Supply	30 Watts per port
Per Port PoE	(4) 802.3at PoE+
Non-PoE Ports	(4)

LEDS	
PoE	Orange
Network	Orange: 10/100 Mbps, Blue: 1000Mbps
SFP/SFP+	None

HARDWARE	
Packet Buffer	4.1 Mbit
Mac Table Size	8 K
Energy Efficient Ethernet	Yes
Management	Factory reset button
Band	2.4 GHz
Bluetooth Version	BLE
Total Power	5 dBm EIRP
Gain	3 dBi

POWER	
Max Power Consumption w/o PoE	8 Watts
Max Power Consumption Full PoE	68 Watts
Output	PoE+, 54VDC, 0.6A Max.
Power Supply	Universal AC, 100 - 240VAC 50-60Hz External
RJ45 Port Surge Protection	12kV for ESD - contact, 25kV for ESD - Air

ENVIRONMENTAL	
Mounting	Locking Wallmount
Operating Temperature	-5 to 50° C (23 to 122° F)
Operating Humidity	10 to 90% Noncondensing
IP Rating	None
EMI Rating	EMI Class-B with 3dB margin
Cooling Fan	No (Fanless cooling)
Certifications	CE, FCC, IC



## SPECIFICATIONS

MECHANICAL	
Dimensions	44 x 254 x 441.5 mm (1.7 x 10 x 17.4")
Weight	3.6 kg (7.9 lbs)
Material Type	SGCC
Material Finish	Powder coat - Matte
Color	Metallic gray

PORTS	
Interface Ports	(16) 10/100/1000 Mbps
SFP/SFP+	(2) SFP
Switching Capacity	36 Gbps
Non-blocking Throughput	18 Gbps
Forwarding Rate	26.8 Gbps
PoE Budget/Max	120 Watts
PoE Supply	30 Watts per port
Per Port PoE	(8) 802.3at PoE+
Non-PoE Ports	(10)

LEDS	
PoE	Orange
Network	Orange: 10/100 Mbps, Blue: 1000 Mbps
SFP	Blue: Link/Activity (1000 Mbps)

HARDWARE	
Packet Buffer	4.1 Mbit
Mac Table Size	8 K
Energy Efficient Ethernet	Yes
Management	Factory reset button
Band	2.4 GHz
Bluetooth Version	BLE
Total Power	7 dBm EIRP
Gain	2 dBi

POWER	
Max Power Consumption w/o PoE	23 Watts
Max Power Consumption Full PoE	143 Watts
Output	PoE+, 54VDC, 0.6A Max.
Power Supply	Universal AC, 100 - 240VAC 50-60Hz Internal
RJ45 Port Surge Protection	12kV for ESD - contact, 25kV for ESD - Air

ENVIRONMENTAL	
Mounting	Rackmount, Wallmount
Operating Temperature	-5 to 50° C (23 to 122° F)
Operating Humidity	10 to 90% Noncondensing
IP Rating	None
EMI Rating	EMI Class-A with 3dB margin
Cooling Fan	No (Fanless cooling)
Certifications	CE, FCC, IC



## SPECIFICATIONS

MECHANICAL	
Dimensions	44 x 254 x 441.5 mm (1.7 x 10 x 17.4")
Weight	3.6 kg (7.9 lbs)
Material Type	SGCC
Material Finish	Powder coat - Matte
Color	Metalic gray

PORTS	
Interface ports	(24) 10/100/1000 Mbps
SFP/SFP+	(2) SFP+
Switching Capacity	88 Gbps
Non-blocking Throughput	44 Gbps
Forwarding Rate	65.5 Gbps
PoE Budget/Max	240 Watts
PoE Supply	30 Watts per port
Per Port PoE	(16) 802.3at PoE+
Non-PoE Ports	(10)

LEDS	
PoE	Orange
Network	Orange: 10/100 Mbps, Blue: 1000 Mbps
SFP/SFP+	Blue: Link/Activity (1, 2.5, or 5 Gbps) White: Link/Activity (10 Gbps)

HARDWARE	
Packet Buffer	12 Mbit
Mac Table Size	16 K
Energy Efficient Ethernet	Yes
Management	Factory reset button
Band	2.4 GHz
Bluetooth Version	BLE
Total Power	7 dBm EIRP
Gain	2 dBi

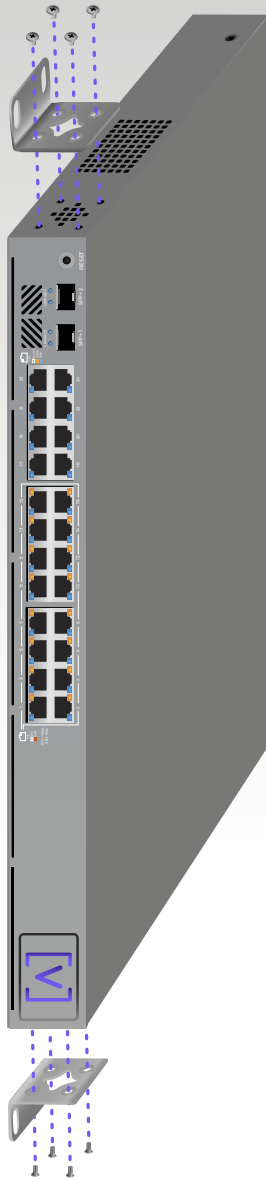
POWER	
Max Power Consumption w/o PoE	53 Watts
Max Power Consumption Full PoE	295 Watts
Output	PoE+, 54VDC, 0.6A Max.
Power Supply	Universal AC, 100 - 240VAC 50-60Hz Internal
RJ45 Port Surge Protection	12kV for ESD - contact, 25kV for ESD - Air

ENVIRONMENTAL	
Mounting	Rackmount, Wallmount
Operating Temperature	-5 to 50° C (23 to 122° F)
Operating Humidity	10 to 90% Noncondensing
IP Rating	None
EMI Rating	EMI Class-A with 3dB margin
Cooling Fan	Yes
Certifications	CE, FCC, IC



### Mounting Flexibility

The S24-PoE and S16-PoE include rack ears that can be connected to the switches for rack installation or mounting on a wall.



The rack ears are designed to keep the cooling vents exposed.



The S24-PoE and S16-PoE switches include the Rackstud™ DUO toolless rackmount system.



The S8-PoE switch has padding for desktop placement and notches for mounting on the included wall-mount bracket.

