



## 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   | ✓      | ✓            | ✓             |

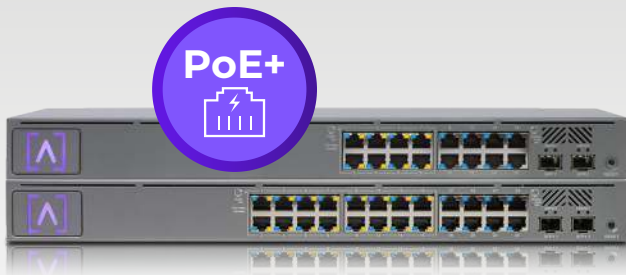
## FEATURES

- 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.



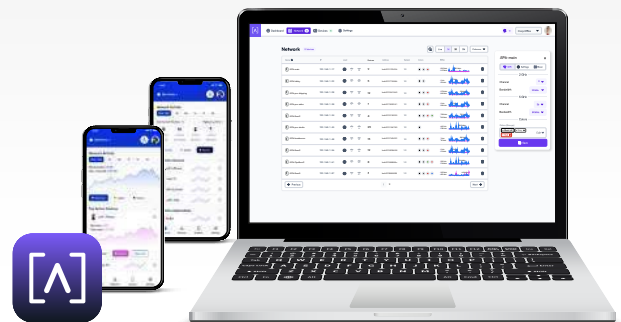
## Bluetooth Setup

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 use Google Authentication.



## 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](https://forum.alta.inc) to brainstorm innovative uses of advanced features via our command line interface.

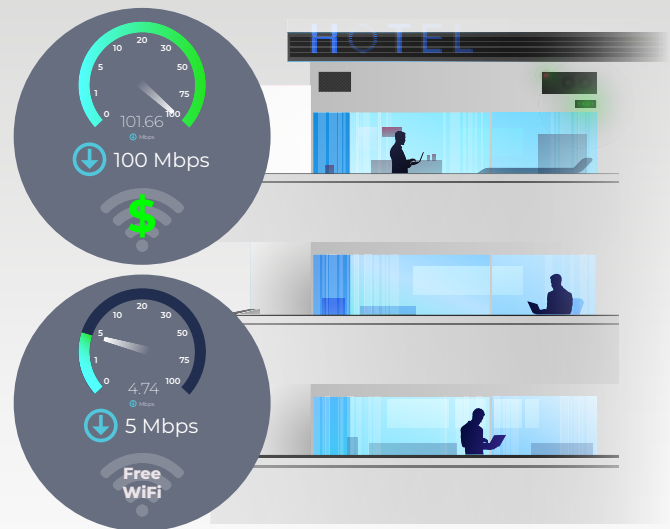
### VLAN Stacking

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.



## Coming Soon via Firmware Update

### 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.

### Network Loop Detection

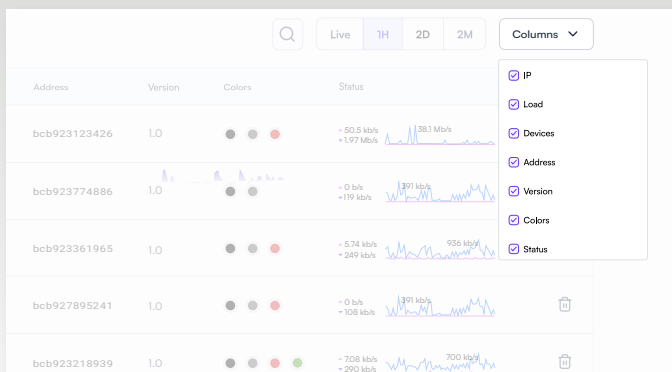
Network loops can deteriorate performance or even cause network failure. Our built-in network loop detection functionality is designed to help you eliminate any potential network loops.

## 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.

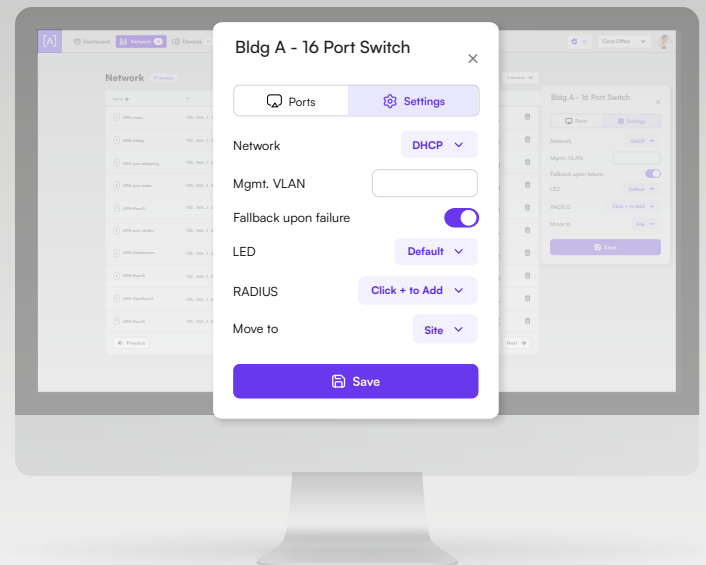


### Status Snapshots

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.

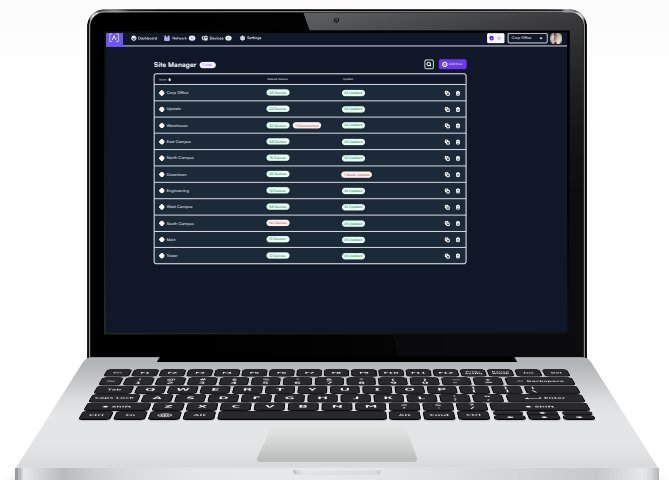
## Device Cards

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 |
| Bluetooth                 | Yes, Setup           |

| 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 |
| Bluetooth                 | Yes, Setup           |

| 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)<br>White: Link/Activity (10 Gbps) |

| HARDWARE                  |                      |
|---------------------------|----------------------|
| Packet Buffer             | 4.1 Mbit             |
| Mac Table Size            | 8 K                  |
| Energy Efficient Ethernet | Yes                  |
| Management                | Factory reset button |
| Bluetooth                 | Yes, Setup           |

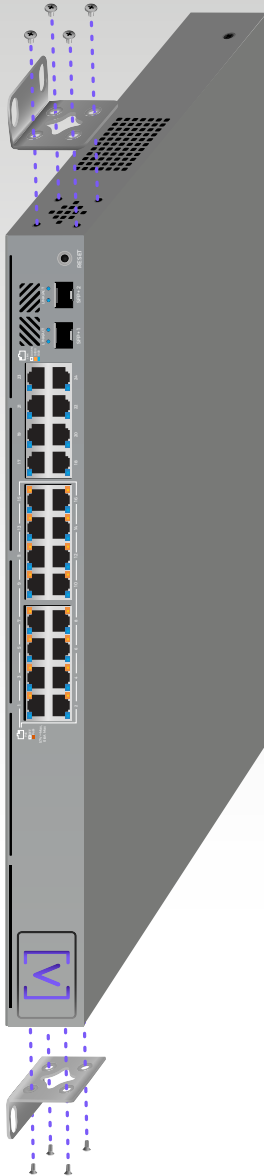
| POWER                          |                                             |
|--------------------------------|---------------------------------------------|
| Max Power Consumption w/o PoE  | 53 Watts                                    |
| Max Power Consumption Full PoE | 295 Watts                                   |
| 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.

