

Photon 160 Installation & Quick Start Guide

Token-Based Authorization

This document describes how to get started using the Photon 160 with token-based authorization. Token-based authorization is performed using a token downloaded from the managing Stellar Cyber server's **Sensor Installation** page.

The steps are as follows:

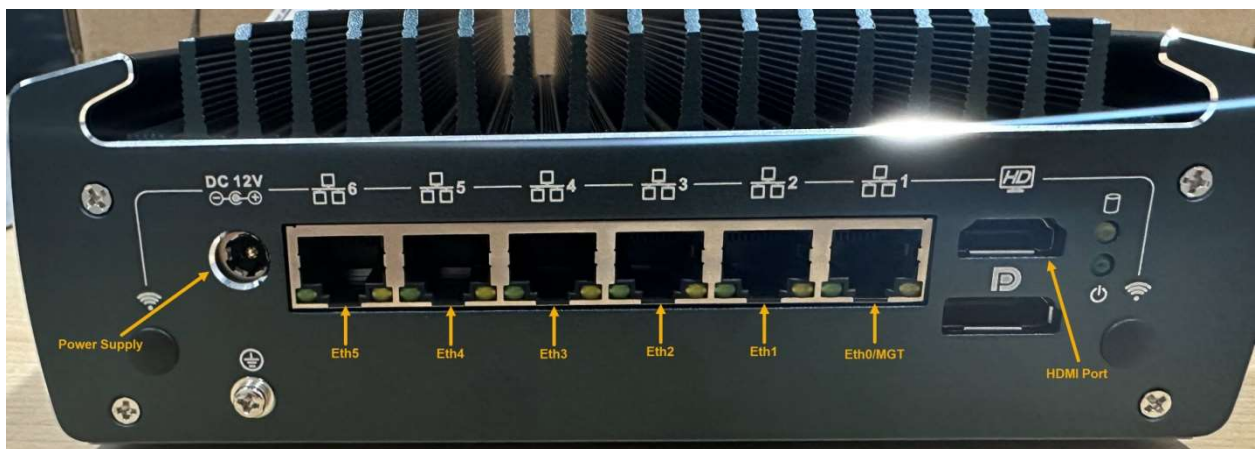
- Connect power.
- Connect the Photon 160 to the network.
- Obtain an installation token from the Stellar Cyber GUI.
- Access the Photon 160 CLI.
- Change the management port settings.
- Apply the installation token in the CLI.

Connecting Power

To connect power to the appliance, have a licensed DC power technician:

1. Connect the included power cable to the DC power source.
2. Connect the cable to the Photon 160.
3. Press the power button.

Connecting to the Network



To connect the Photon 160 to the network:

1. Connect the management port (□□1) to a network accessible by the DP.
2. Use the □□2..□□6 monitor ports to connect to data sources (mirror ports or taps).

Obtaining an Installation Token


Some Stellar Cyber deployments use tokens to authorize and configure the installation of a sensor. Tokens point the installed sensor to the correct DP, assign the specified tenant, and authorize the sensor installation.

Use the following procedure to obtain a token in the Stellar Cyber GUI:

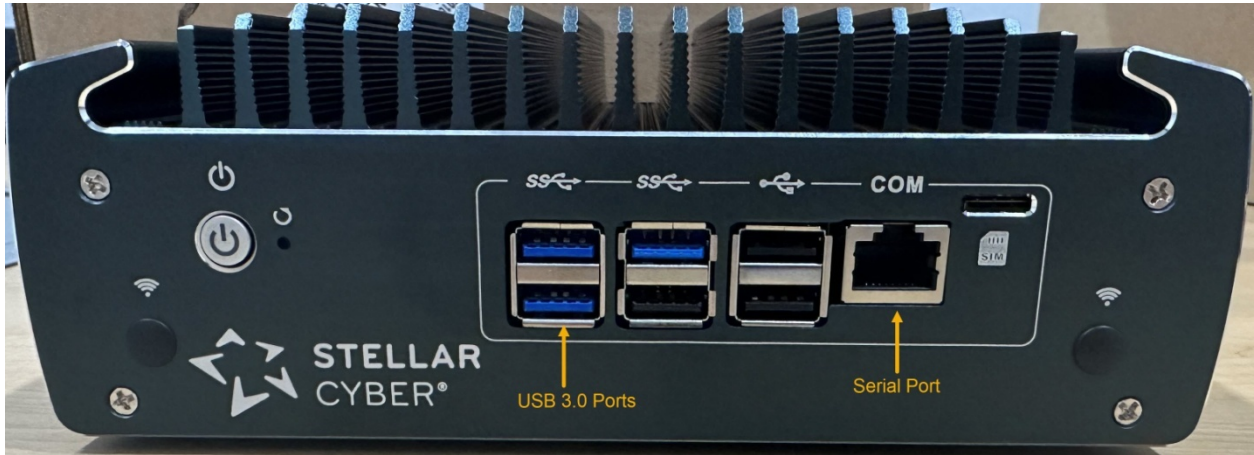
1. Navigate to the **System | Deployment | Sensor Installation** page and click on the **Tokens** tab.
2. If a token already exists for the target tenant for the sensor installation, you can either use the **Copy** button to copy it to the clipboard or use the **Download** button to download it as a file.
 - Copy the token if you plan on applying it by pasting it into a `set token string <token>` command in the CLI.
 - Download the token as a file if you plan on hosting the file on an HTTP server and referring to it in a `set token url <token url>` command.
3. If there is not already an unexpired token for the target tenant, click the **Generate** button.
4. Select the tenant for the token from the **Tenant** dropdown. This is the tenant to which all sensors authorized with this token will be automatically assigned. The dropdown lists all tenants configured for your organization in the **System | Tenants** page.
5. Click the **Generate** button. The system generates the token and displays its contents in the **Token** field. The dialog also updates to display the expiration date for the token.
6. You can use the **Copy** button to copy the token to the clipboard immediately, or simply close the dialog and retrieve the token from the **Tokens** tab later on.

Accessing the Model 160 CLI

You can access the Model 160 using any of the following techniques:

- HDMI monitor and USB keyboard
- Serial console port
- SSH to the eth0 Management port ( 1)

The USB and serial console ports are at the front of the appliance. The HDMI and eth0 Management ports are at the rear:



HDMI/USB Access

Connect an HDMI monitor to the HDMI port and a USB keyboard to one of the USB 3.0 ports.

Console Access

For console access use an RJ45 serial cable with the following settings:

- Baud: 115,200
- Flow control: none
- Data bit: 8
- Parity check: none
- Stop bit: 1

SSH Access

The default management IP address on the Photon 160 is **192.168.1.100/24**, and the default gateway IP address is: **192.168.1.1**. The default username is **aella** and the password is **changeme**.

For SSH access to the Photon 160:

```
ssh -l aella@192.168.1.100
```

Change the Management Port Settings

1. You should still be logged in to your sensor from the previous procedure. If you are not, log in now using either SSH or a console connection with the credentials you set in the previous procedure.
2. You can set IP parameters manually using commands similar to the following (substitute your own IP parameters for the ones shown in bold below):
 - `set interface management ip 192.168.14.100/255.255.255.0`
 - `set interface management gateway 192.168.14.1`
 - `set interface management dns 8.8.8.8`
3. Verify the IP settings with the `show interfaces` command.

Applying the Token to the Sensor

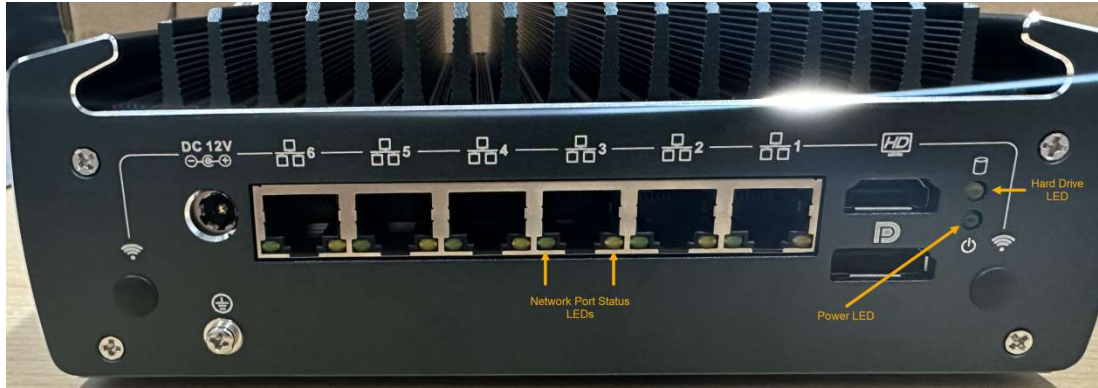
Use the following procedure to apply a token to a sensor.

1. Apply the token to the installed sensor from the sensor CLI with the `set token` command. The available techniques are as follows:
 - **Copy and Paste Token String** – Copy the token string from the **Tokens** tab and paste it into the CLI command. The syntax is as follows:
`set token string <pasted string>`
 - **Host Token on HTTP Server** – Download the token as a file from the **Tokens** tab, upload it to an HTTP server, and reference it in the `set token` command. The syntax is as follows:
`set token url http://<url to token>`
2. The CLI reports that the Sensor token is successfully set.

Note: If you receive an error message instead, it's possible that the token has expired. Refer to the **Tokens** tab to see the expiration date. If you are using the File technique, it's also possible that an extra space or line may have crept into your text file – check the file to make sure it includes only the token text.
3. Wait a minute or so. Then, verify that the token was successfully applied using any combination of the following techniques:
 - Check the **System | Sensors** tab in the user interface to see that the sensor has registered itself successfully.
 - Verify that the `show system` command shows all services as running.
 - Verify that the `show receiver` command displays a receiver.
 - Verify that the `show json` command reports some data sent in the `BYTE_SENT` column.

Understanding the Photon 160 LEDs

The Photon 160 includes power, hard drive, and network port status LEDs at the rear of the sensor, as illustrated below.



Hard Drive and Power LEDs

The hard drive and power LEDs work as follows:

Hard Drive LED	Power LED	Meaning
OFF	OFF	Power is off
OFF	Green	Device is loading at boot
Orange	Green	Device is fully powered on

Network Port Status LEDs

The network port status LEDs are the same for all network ports. The left LED is green and indicates the speed of the connected link. The right LED is orange and blinks if a link is connected.

Green (Speed) LED	Orange (Activity) LED	Meaning
OFF	OFF	Not connected to network.
OFF	Blinking	Connected to 100 Mbps link
ON	Blinking	Device is connected to 1.0 or 2.5 Gbps link.

Front Power Button

The power button on the front of the Photon 160 also lights in blue when the sensor is powered on, as illustrated below:

