



# Helo F1





UV DISINFECTION FROM ABOVE



The Helo F1 disinfects a whole room, delivering disinfection from above. The unit can be ordered for installation in a drop-in grid ceiling, recessed in a hard lid ceiling, surface or wall mounted, or used as a portable, table top unit. It emits broad spectrum UV light to eliminate up to 99.9% of the bacteria, viruses, and fungi in a space<sup>1</sup>. In rooms that have been cleaned of mold, the unit will help control return growth if used routinely<sup>2</sup>.

The unit can be ordered for scheduled commissioning or integration into the facility Building Automation System (BAS). Scheduled commissioning is completed by a PURO Lighting representative. Units integrated into BACnet are programmed through the BAS dashboard.

1. Independently validated to kill up to 99.9% of *E. coli*, MRSA, Salmonella enterica, Norovirus, human coronavirus 229E, *C. diff* and *C. auris*  
2. Research Journal of Microbiology, 2 (1), 42-49, 2007; Mycological Research, Vol. 92, Issue 3, 1989

-  **Broad Spectrum UV-C, UV-B and UV-A light to kill bacteria and viruses<sup>1</sup>.**
-  **Ceiling or wall mounted installation to disinfect a whole room without relocation.**
-  **Programmed manually or integrated into building automation systems through BACnet.**
-  **Single UV Light Engine with pulsed Xenon lamp for up to a 10' x 10' ft coverage area.**

POWERED BY VIOLET DEFENSE® TECHNOLOGY

# HELIO

## PRODUCT SPECIFICATIONS

### UV ILLUMINATION

Light Source	Proprietary Pulsed Xenon Lamp	
Pulse Interval	1 UV Flash every 6 seconds	
Wavelengths	UV-C (200-280nm)	Germicidal
	UV-B (280-320nm)	Germicidal
	UV-A (320-400nm)	Bactericidal
Range	Up to 10' x 10' typical (100 sq feet)	
UV Bulb Rated Life	>2 Million UV Flashes	

### ELECTRICAL SYSTEM

Input Voltage	110V AC
Max Current	3.5 Amps
Average Power	60W during operation
Power Connection	3-prong grounded plug

### PHYSICAL

Weight	F1: 2.6 lbs, H1-DA-12: 2.1 lbs, H1-GA-24: 4 lbs
Housing/Finish	Brushed Aluminum
Optics	Single patented UV Light Engine with transmissive UV lens and pulsed Xenon UV lamp
Beam Angle	170°

### ENVIRONMENT

Ambient Operating Temperature	41°F to 104°F
Ambient Operating Humidity	<80%RH non-condensing

### CERTIFICATIONS

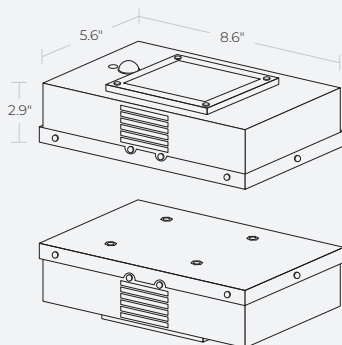
Safety	TUV Certified, tested to UL 61010-1:2012; CAN/CSA C22.2 NO. 61010-1:2012
FCC	Compliant with Part 15 Class A
RoHS	Compliant

### WARRANTY

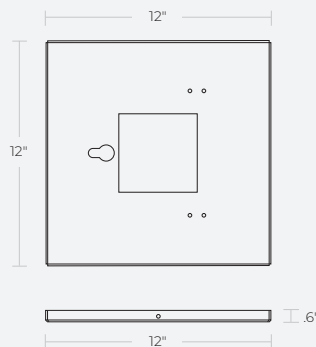
Warranty	1 year
----------	--------

## DIMENSIONS

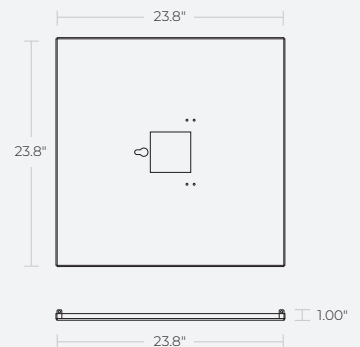
**Helo F1** (no flange)  
Dimensions: 8.60" x 5.60" x 2.90"  
Installation: wall mount, surface mount or portable/table top use



**H1-DA-12** (12"x12" flange accessory)  
Dimensions: 12" x 12" x 0.6"  
Installation: recessed in hard lid ceiling



**H1-GA-24** (24"x24" flange accessory)  
Dimensions: 23.80" x 23.80" x 1.00"  
Installation: drop-in grid ceiling





## CONTROL OPTIONS

**Controlled through BACnet** The unit can be switched on/off through the facility BACnet. Programming is done through the Building Automation Software system dashboard.

**Manually Controlled** The unit can be manually switched on/off for a single default or commissioned cycle through a switched or a remote-controlled outlet. Commissioning is done at the device using an Ethernet port and a simple setup wizard.

**Safety and Occupancy Sensors** The redundant safety systems ensure the unit will not activate while the room is occupied and will immediately suspend operations if motion is detected in a previously unoccupied room. If interrupted, the unit will resume its programmed cleaning cycle once motion is no longer detected.

## OPERATIONAL MODES

The unit can be ordered to operate in either a BACnet integrated mode, scheduled mode, or single cycle mode. The modes are configured at the factory and cannot be changed on the device.

**BACnet Integration Mode** Disinfection-on-Demand operation is programmed through the Building Automation Software (BAS) with the Helo F1 through BACnet.

The cycle time, cycle repeat, cycle schedule and motion sensor settings and unit on/off and initial activation are controlled through the system dashboard.

Devices ordered with the BACnet Integration Mode must be initially activated through the BAS software to operate.

NOTE: By default, this mode will have safety features DEACTIVATED.

**Scheduled Mode** The Helo F1 units are manually commissioned by a PURO Lighting representative. Commissioning for Disinfection-on-Demand includes cycle time, cycle repeat and cycle schedule settings.

**Single Cycle Mode** The Helo F1 units will run either a 10, 15, 20, 25 or 30 minute cycle once it is plugged in. The unit will not run another cycle until the power has been disconnected and reconnected.

Refer to the Commissioning Form on page 5 for more information on operational modes.

## INSTALLATION

### Wiring

All units ship with a 6 foot cord terminated with a grounded 110V plug.

**110V Outlet** The unit can be plugged into a non-GFI outlet. If an outlet is not accessible near the fixture location, you may require a sufficiently rated, grounded extension cord or have a licensed electrician to install an outlet.

**Switched 110V Outlet** The non-GFI 110V outlet may be a switched outlet for convenience, especially in scheduled commissioned and controlled units. If a switch is not available, you may require a licensed electrician to install the switch.

**Wi-Fi Smart Outlet** The unit may also be plugged into a Wi-Fi or Bluetooth controlled smart outlet, eliminating the need to install a switch and using instead a smartphone based application to turn the unit on/off through the smart outlet.

### Mounting

**Drop-in Ceilings** The Helo F1 with its 24"x24" flange kit accessory is simply dropped into a 24"x24" or 24"x48" drop-in ceiling.

**Recessed Hard Lid Ceilings** The Helo F1 has an integrated 12"x12" flange kit accessory enabling it to be recessed in a hard lid ceiling.

**Wall Mount, Surface Mount or Portable/Table Top Use** The Helo F1 has attach points for a 100mmx100mm VESA mount for wall or surface mounting. The unit can also be used as a portable or table top unit.



### CERTIFICATIONS



This device is tested and certified by TUV to UL specifications.



Tested to be compliant with FCC Part 15 Class A.

Internal components of this device are UL Listed, UL Recognized or CE listed. Independent lab testing has been conducted by accredited facilities, including Microchem Laboratory, an ISO 17025 accredited facility.

### NOTES

1. Disinfection is a function of device run time and the distance to the UV light source.
2. Operating Life is dependent on frequency and duration of disinfection cycles.

Cycle	Standard	Deep	Terminal
Time	30 min/day	1 hr/day	2 hr/day
Approx. Bulb Life	18.3 years	9.1 years	4.6 years

### CAUTION

CAUTION — IF THE FIXTURE EXHIBITS UNDESIRABLE OPERATION (BUZZING, FLICKERING, ETC. OR IF THE UNIT'S LED STATUS INDICATOR IS FLASHING RED), IMMEDIATELY TURN OFF POWER AND CONTACT MANUFACTURER.

INDOOR USE ONLY.

### HOW TO ORDER

Please specify components below using the letter code in bold to select the desired options.



Family	Model	Cord Length	Cord Termination	Controls	Wattage
<b>H</b> = Helo	<b>F1</b> = Fixture unit with Single UV Light Engine	<b>6</b> = 6 feet	<b>P</b> = Three-prong grounded plug	<b>SCM</b> = Single Cycle Mode <b>SCHED</b> = Scheduled Mode <b>AHU</b> = Air Handling Unit	<b>110</b> = 110V AC
Example order: <b>H-F1-6-P-SCM-110</b>					

#### Accessories

- H1-DA-12** = Accessory for Single UV Light Engine in hard lid ceilings: 12"x12" flange kit  
**H1-GA-24** = Accessory for Single UV Light Engine in drop-in ceilings: 24"x24" flange kit



# Commissioning Form

Name

SO Number

Please choose one from the three commissioning options below.

## 1. Single Cycle Mode

10 min   15 min   20 min   25 min   30 min

Unit will run either a 10, 15, 20, 25 or 30 min cycle once it is powered on. The unit will not run another cycle until the power has been disconnected and reconnected.

## 2. Daily Scheduled Mode

How many cycles per day?  
(Indicate with a number 1-8)

Duration for each cycle? (Choose one)

10 min   15 min   20 min   25 min   30 min

Please note time of day you would like the schedule to take place. Helo fixture should only be scheduled during times when the space will be unoccupied.

Notes

Units can be scheduled to run up to eight separate cycles per day. If scheduling more than once daily please designate in notes

## 3. Air Handling Unit Mode

Standard  
(15-minute run every 3 hours)

High Intensity  
(30-minute run every 3 hours)

For every 30 minutes of unit operation the fixture will automatically shut down for 15 minutes to ensure proper cooling and will continue after 15 minutes.

What time zone will the unit(s) be operated in?

Eastern

Central

Mountain

Pacific

Alaska

Hawaii

Notes

Full Name

Date

support@purolighting.com  
Phone: (877) 452-8785 | Fax: (720) 713-7421