

# Global Plasma Solutions

## GPS-4800-AC

### IOM



Front View



Side View



Mounting Flange  
View—bottom

### Installation

The GPS-4800-AC is designed for metal duct mounting applications. The preferred mounting location is after a prefilter and before the cooling coil. Alternate mounting locations are on the supply air duct or the return air duct after the system filter. The weatherproof housing will allow mounting indoors or out.

Step 1. Power off the HVAC system the unit will be added.

Step 2. After finding the appropriate location, cut or drill a 4 inch (100mm) round hole. Insert the unit into the 4 inch (100mm) round hole and secure with four self tapping screws or wing nuts provided.

### CAUTION/WARNING:

1. This product shall not be installed behind a suspended floor/ceiling or a structural wall, ceiling or floor.
2. This product is designed for mounting to duct of metallic construction only. Installation must be such that the structural integrity of the ducting is not compromised.
3. Warning: Risk of Electric Shock. Can Cause Injury or Death: Disconnect All Remote Electric Power Supplies Before Servicing
4. Caution: High Voltage Shock Hazard. Never Touch Brushes While Operating.

### Wiring

Confirm power is off prior to wiring. Follow all local and national electric, mechanical and building codes when installing and wiring. The GPS-4800-AC can be powered with a 24VAC low voltage circuit or 110VAC to 240VAC high voltage circuit. The face panel of the unit is labeled showing which terminals are 24VAC, 110-240VAC input and neutral and come prewired from the factory. Opening the unit is not necessary for installation. The unit is provided with 6 feet of liquid-tight flex conduit to reach a junction box for wiring. The wires are color coded as follows:

**Black = 110-240VAC input    White = Neutral    Gray = 24VAC input    Green/Brown = Alarm Dry Contact**

The unit is provided with alarm contacts for use with a building management system. When the unit is powered and there are no faults, the alarm “dry” contacts will be closed, providing continuity. The contacts are rated up to 250VAC at 1A.



**Operation**

Once powered, the unit initiates an internal check of all systems. After initializing, the display will blink between “On”, “GPS” and the number of days the unit has been powered. If there is a fault, the unit display will show “FALT”.

Cleaning Cycle — The GPS-4800-AC comes with a preset cleaning cycle designed to clean the brushes every 5 days. At any time, the cleaning cycle test button on the front panel may be pushed and the unit will initiate a cleaning cycle. While the cleaning cycle is engaged, the display will change to “CLEA”. To change the cycle frequency, hold the cleaning cycle button in for 5 seconds once the display shows “CLEA” and then press it until you see the number of days you want it to wait between cycles, 1, 5, 10 and 20. Most applications will never require field reprogramming.

**Maintenance**

The GPS-4800-AC is designed to be maintenance free, thanks to the patent-pending self-cleaning system. Over time and hundreds of self cleaning cycles, the carbon fiber brushes may wear down due to mechanical friction and require replacement. With the unit powered off, remove the four screws holding the clear cover, remove the one machine screw at the 5 O’clock position and pull out the green five position pluggable terminal block. Twist the unit counter-clockwise 3/4 turn to remove from duct. Remove the two Phillips screws holding the brushes down. Pull the brushes out of the electrical connector and insert the new brushes. Replace the Phillips screws, and attach to duct using the same steps above in reverse.

**Troubleshooting**

<b><u>Problem</u></b>	<b><u>Solution</u></b>
Unit won’t power up	Confirm proper voltage is applied and to the correct terminal
Display shows “FALT”	Remove power, wait 1 minute and reapply power. If “FALT” still appears, try using alternate power source, i.e. low voltage input versus high voltage input or vice versa. If FALT still shows, call factory.
No Display / LED	If the correct voltage source has been confirmed and the unit does not power up contact your installing contractor or the GPS factory for servicing.

**Unit Ratings:**

Airflow Capacity:	0 to 4,800 CFM / up to 12 tons	Temperature: -20F to 140F Operating Range
Electrical Ratings:	24-240VAC Input / 12VA	
Fusing:	Internal auto-reset circuit breaker	
Approvals:	UL and cUL	

UL Disclaimer: "The health aspects associated with the use of this product and its ability to aid in disinfection of environmental air have not been investigated by UL LLC."

