

GPS-iMOD™

APPLICATION TIPS

GENERAL GUIDANCE:

The GPS-iMOD is intended for coil cleaning and odor control applications at the air handler. For in-space ions applications see FC and DM application guidance.

The GPS-iMOD is designed to be mounted on the cooling coil inside an AHU or on larger rooftop units for coil cleaning and odor control applications. The iMOD is denoted in the model number/name for "Modular". Its 6" modules are joined in lengths up to 12' per bar.

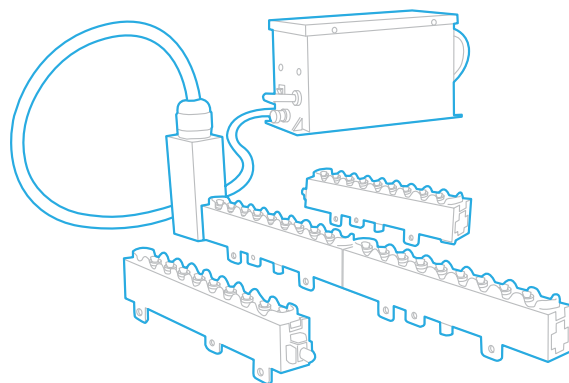
- The longest allowable length for any single bar is 12'.
- Up to 4 bars may be connected to a single power supply.
- Powerheads are available with either 6' or 15' high voltage cables.
 - Modification of any kind to high voltage cables will void the warranty and electrical safety certification.
- If all powerheads have 6' high voltage cables, the maximum total length of bars is 48'.
- If any 15' high voltage cables are utilized, the maximum total length of bars is 40'.
- If you need more than 40 or 48' of total bar length, simply add another power supply.
- If the cooling coil finned length (FL) exceeds 12', a second iMOD bar should be mounted on the coil with an additional power supply mounted on the opposite side of the unit. Both bars should be equal in length to the nearest 6" module. The ends of the two bars should point to each other. See Figure 4 for reference.
- When applied to a coil, the GPS-iMOD bar can cover a maximum of 60" vertical coil height; for cooling coil finned height (FH) greater than 60", a second iMOD bar should be utilized with vertical coverage being equal.
- Add another bar each time there is a vertical break in the coil or whenever there is an intermediate drain pan.
- Ensure airflow across the emitters is not obstructed by the mounting surface materials, such as coil headers, baffles, freezestat sensor, drain pans etc.
- NEVER mount the iMOD bar with the needlepoint emitters facing up to avoid the deposition of condensation or debris.
- The iMOD bar shall cover the entire finned length of coil to the nearest 6" without exceeding the length of the coil.
- If the iMOD bar cannot be installed on the cooling coil, please consult with your local GPS representative.
- It is acceptable to screw the iMOD to 1.5" angle (1/8" thick) spanning the width of taller coils. Additional grounding may be required. (See images on following pages for additional details).
- Install the iMOD bar after the filter, on the upstream of the side of the coil. The iMOD bar should be at least 2" from filters. If there is not enough gap between the filter and the iMOD bar, do not use the iMOD for the application.
- GPS recommends against installing the GPS-iMOD within the light field of a UV product.
- If a humidifier is installed before the cooling coil, and the iMOD bar is installed downstream of the humidifier, ensure that it is outside of the absorption distance for the unit.

* Proper electrical grounding of the GPS-iMOD is critical.

For applications where ion density in the space is the primary concern, use downstream duct mounted or in-space devices. Devices are also available for use in fan coil applications.

HEAVY ODOR GUIDANCE:

For applications with heavy odor remediation requirements, the vertical coverage of each iMOD bar should be reduced from 60" down to 30". Consequently, two bars are required for each 5ft of continuous vertical coil height. See illustrations later in this document



MOUNTING TIPS

Mount the power supply in a dry location near the GPS-iMOD bar(s). Optimal location for the power supply is in the same cabinet section as the iMOD bar(s).

- Utilize the optional NEMA-4X enclosed power supply for mounting in wet or dusty locations.

The high voltage cable between the power supply and the power head should not be coiled together to gather excess length. Coiling this power cable will reduce voltage output to the GPS-iMOD bar, and will result in reduced performance.

Please follow appropriate routing for high voltage (HV) cables as indicated in figures 1 & 2 below:

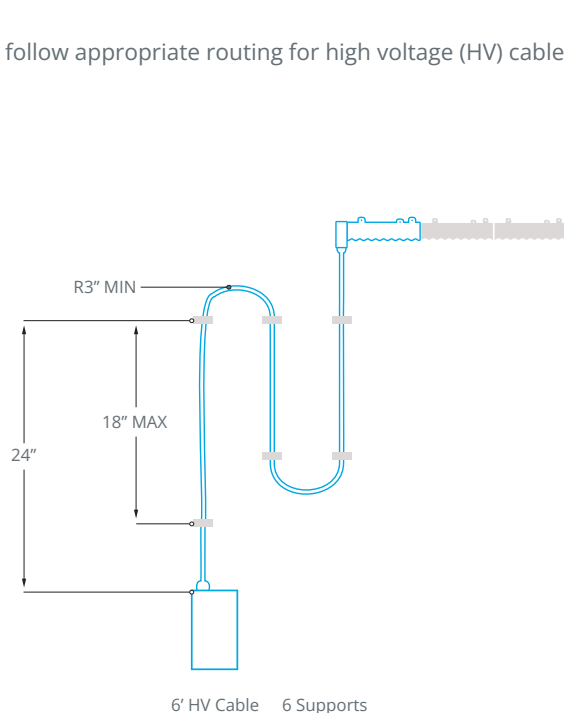


Figure 1.

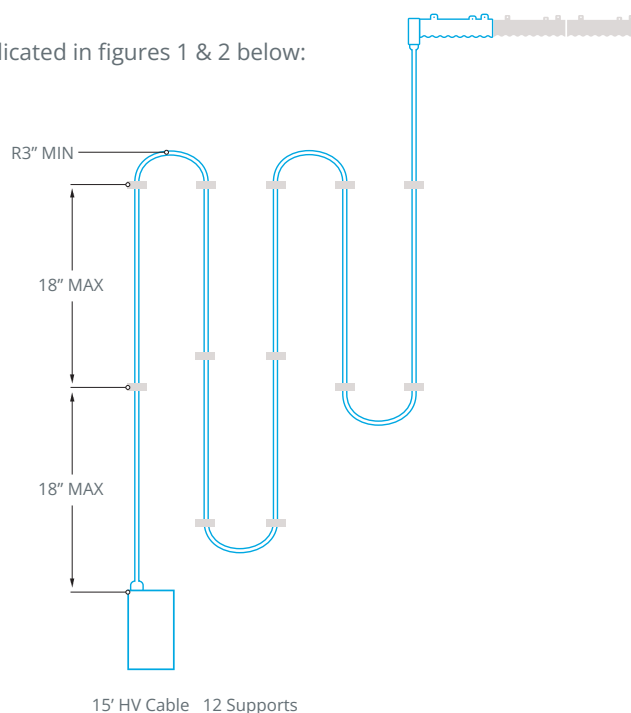


Figure 2.

When securing high voltage cable to a conductive surface, provided stand-offs shall be used every 18\"

The iMOD bar shall be attached to the coil frame using either fasteners, supplied magnets or a combination of both.

The following pages show how bars should be applied to various coil configurations

For the latest applicable version of the GPS-iMOD installation manual, visit www.gpsair.com/downloads or scan the QR code opposite.



SINGLE COOLING COIL

Finned Length (FL) <144"

Finned Height (FH) <60"

Sizing requires HVAC unit coil quantity and each
Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

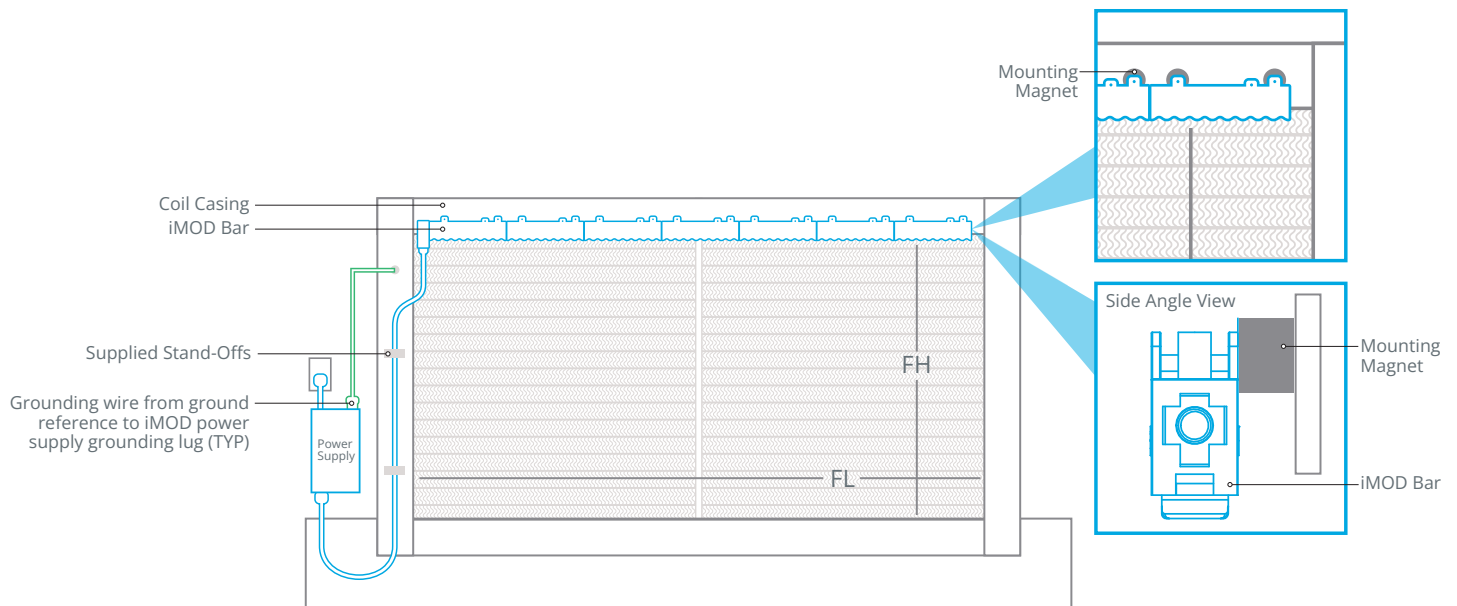


Figure 3.

SINGLE COOLING COIL

Finned Length (FL) >144" & <288"

Finned Height (FH) <60"

Sizing requires HVAC unit coil quantity and each
Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

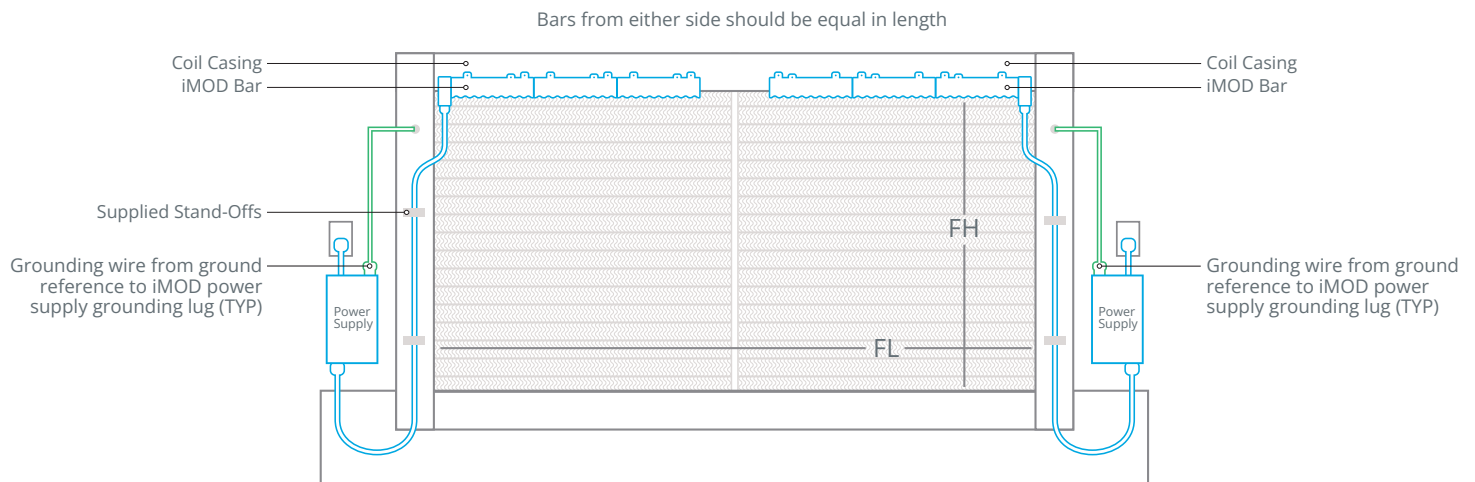


Figure 4.

SINGLE COOLING COIL

Finned Length (FL) <144"

Finned Height (FH) >60" & <120"

Sizing requires HVAC unit coil quantity and each
Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

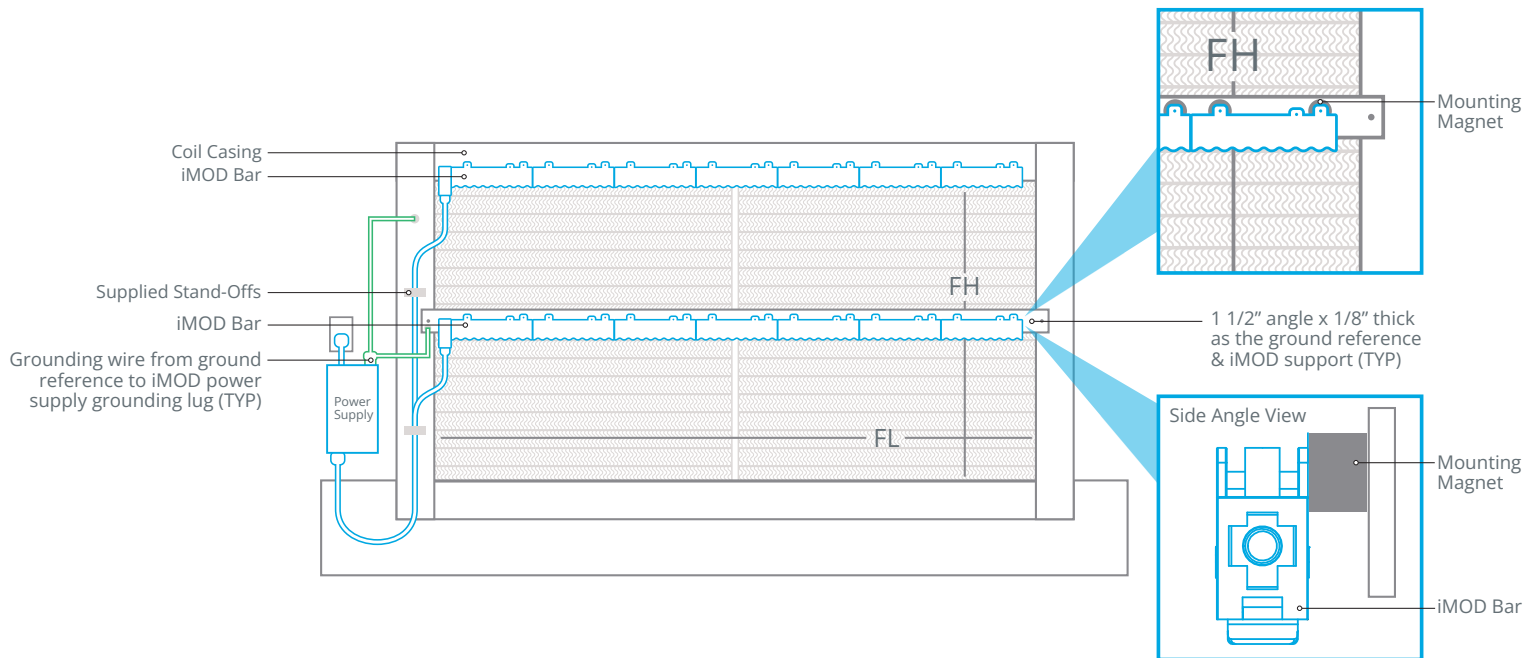


Figure 5.

SINGLE COOLING COIL

Finned Length (FL) >144" & <288"

Finned Height (FH) >60" & <120"

Sizing requires HVAC unit coil quantity and each
Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

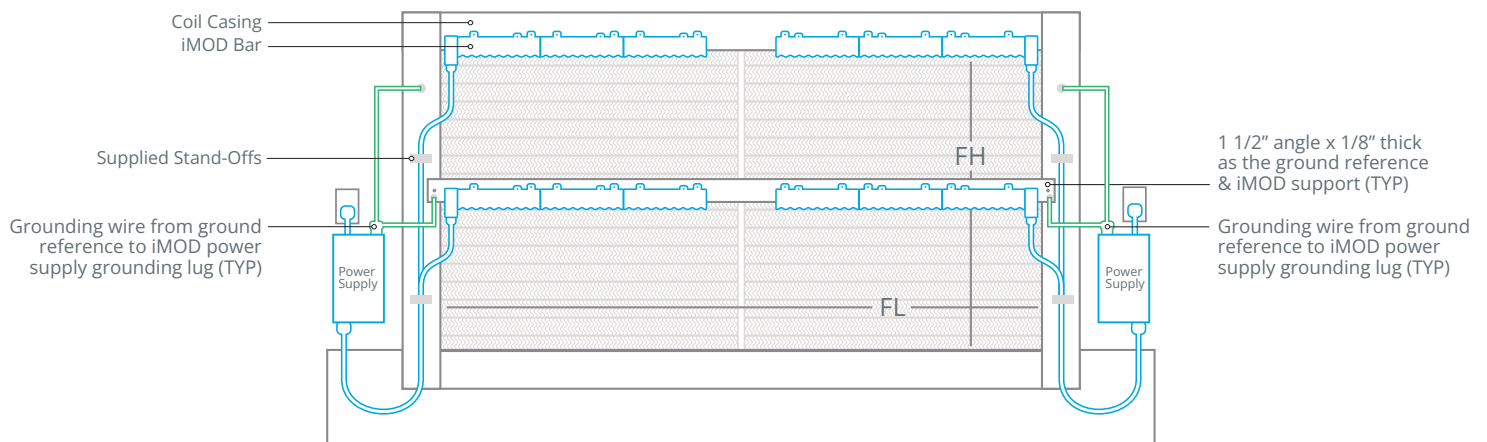


Figure 6.

STACKED COOLING COIL

Finned Length (FL) <144"

Finned Height (FH) <60"
(per coil)

Sizing requires HVAC unit coil quantity and each
Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

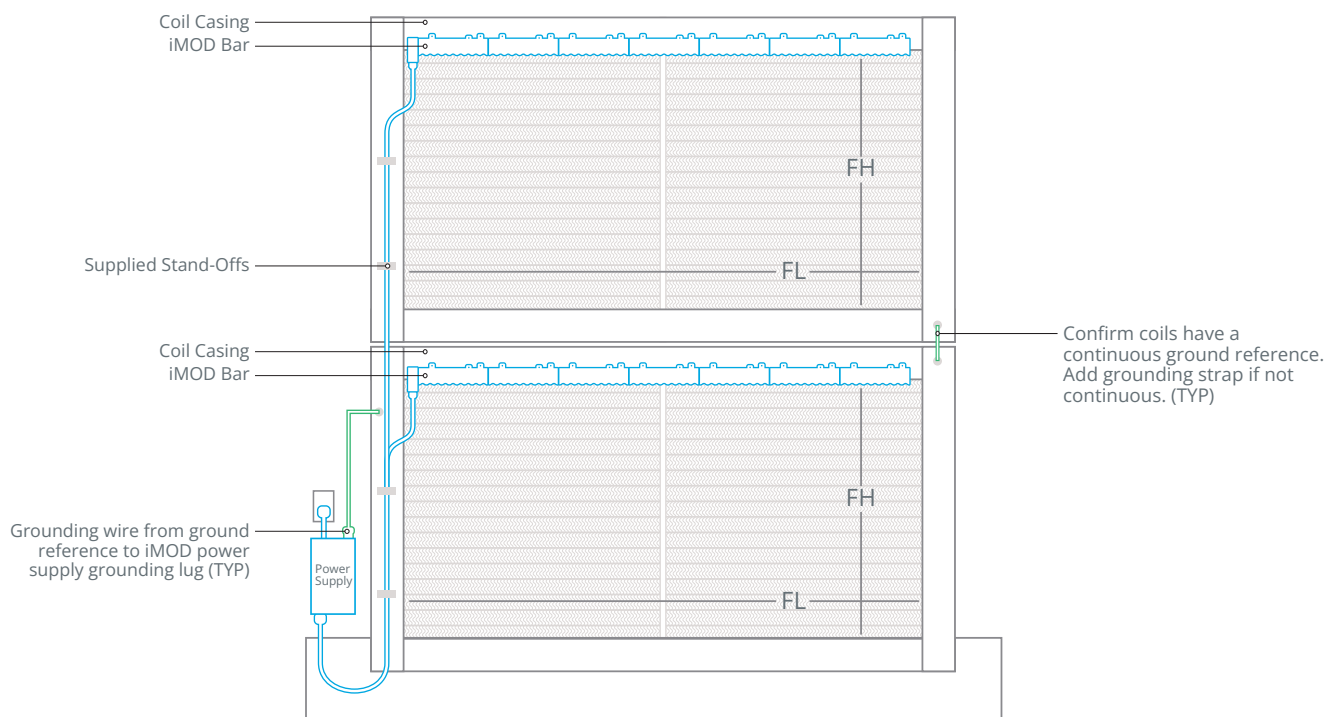


Figure 7.

STACKED COOLING COIL

Finned Length (FL) <144"

Finned Height (FH) <60"

(per coil)

Sizing requires HVAC unit coil quantity and each
Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

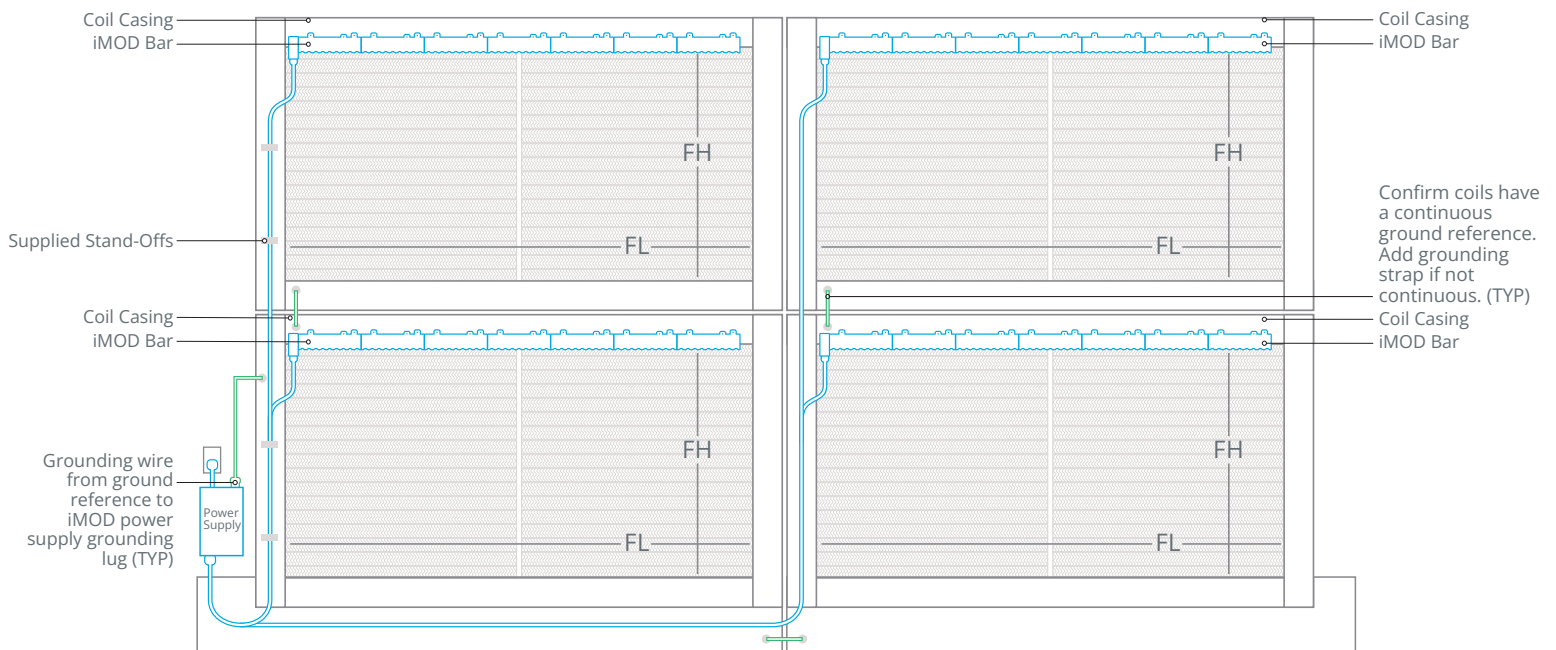


Figure 8.

STACKED COOLING COIL

Finned Length (FL) >144" & <288"

Finned Height (FH) <60"

(per coil)

Sizing requires HVAC unit coil quantity and each

Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____



Figure 9.

STACKED COOLING COIL

Finned Length (FL) >144" & <288"

Finned Height (FH) <60"

(per coil)

Sizing requires HVAC unit coil quantity and each

Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

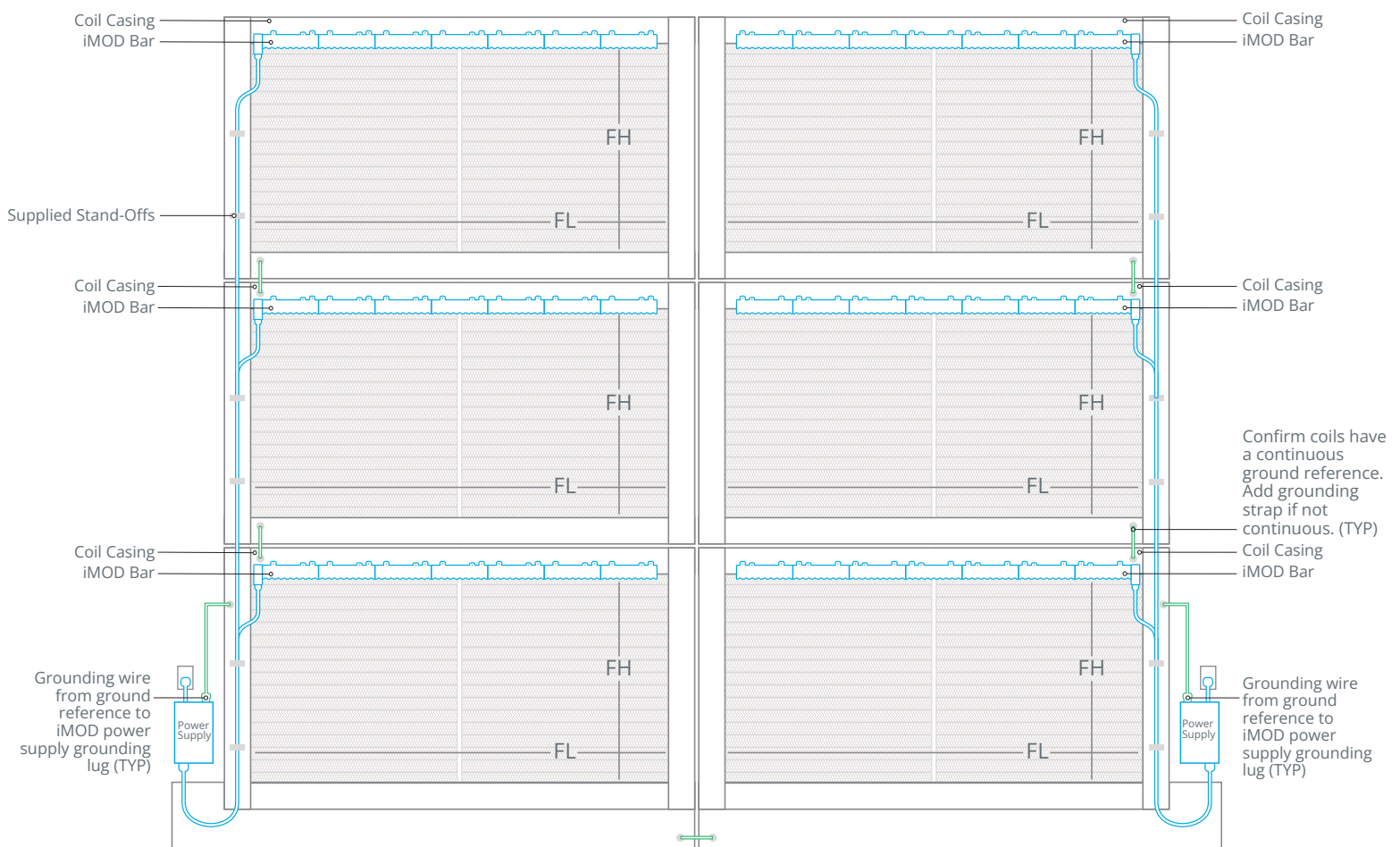


Figure 10.

For coil configurations not shown here, please contact: techsupport@gpsair.com

SINGLE COOLING COIL - HEAVY ODOR CONFIGURATION

Finned Length (FL) <144"

Finned Height (FH) <60"

Sizing requires HVAC unit coil quantity and each Coil
Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

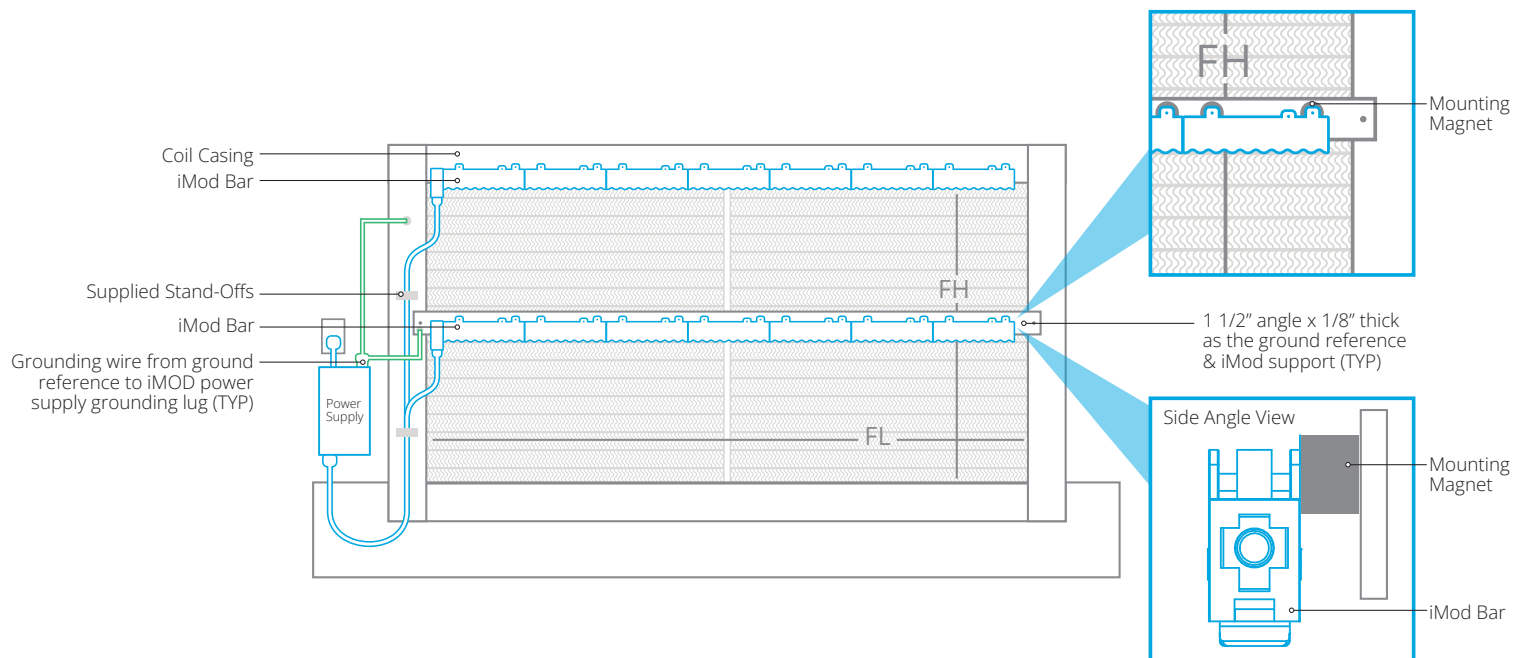


Figure 11.

SINGLE COOLING COIL - HEAVY ODOR CONFIGURATION

Finned Length (FL) >144" & <288"

Finned Height (FH) <60"

Sizing requires HVAC unit coil quantity and each Coil
Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

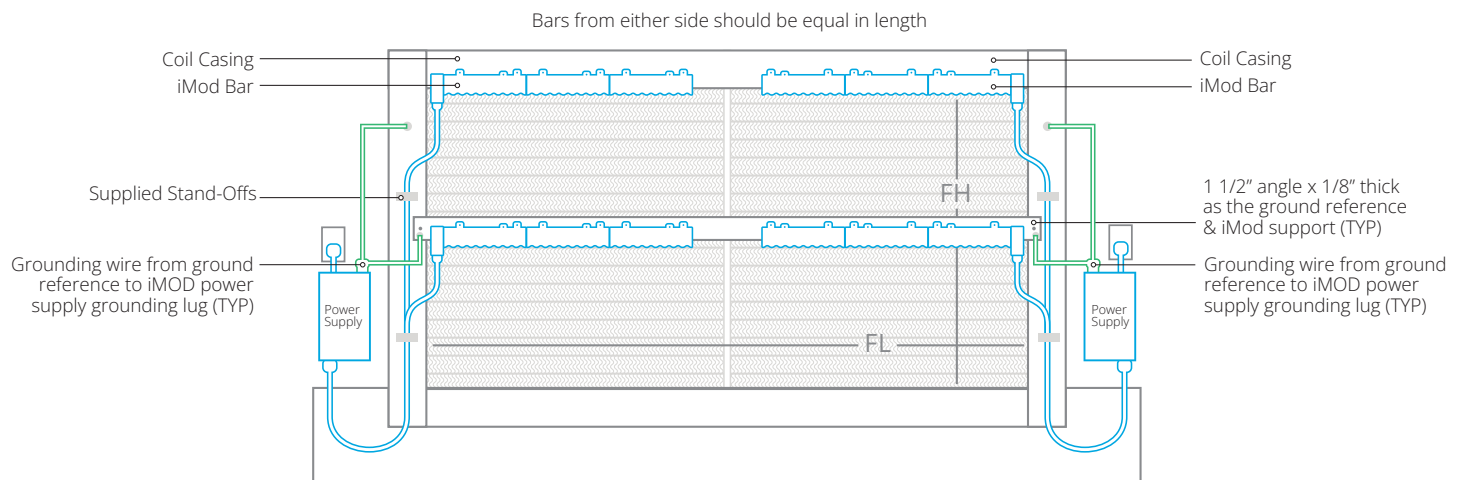


Figure 12.

SINGLE COOLING COIL - HEAVY ODOR CONFIGURATION

Finned Length (FL) <144"

Finned Height (FH) >60" & <120"

Sizing requires HVAC unit coil quantity and each Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

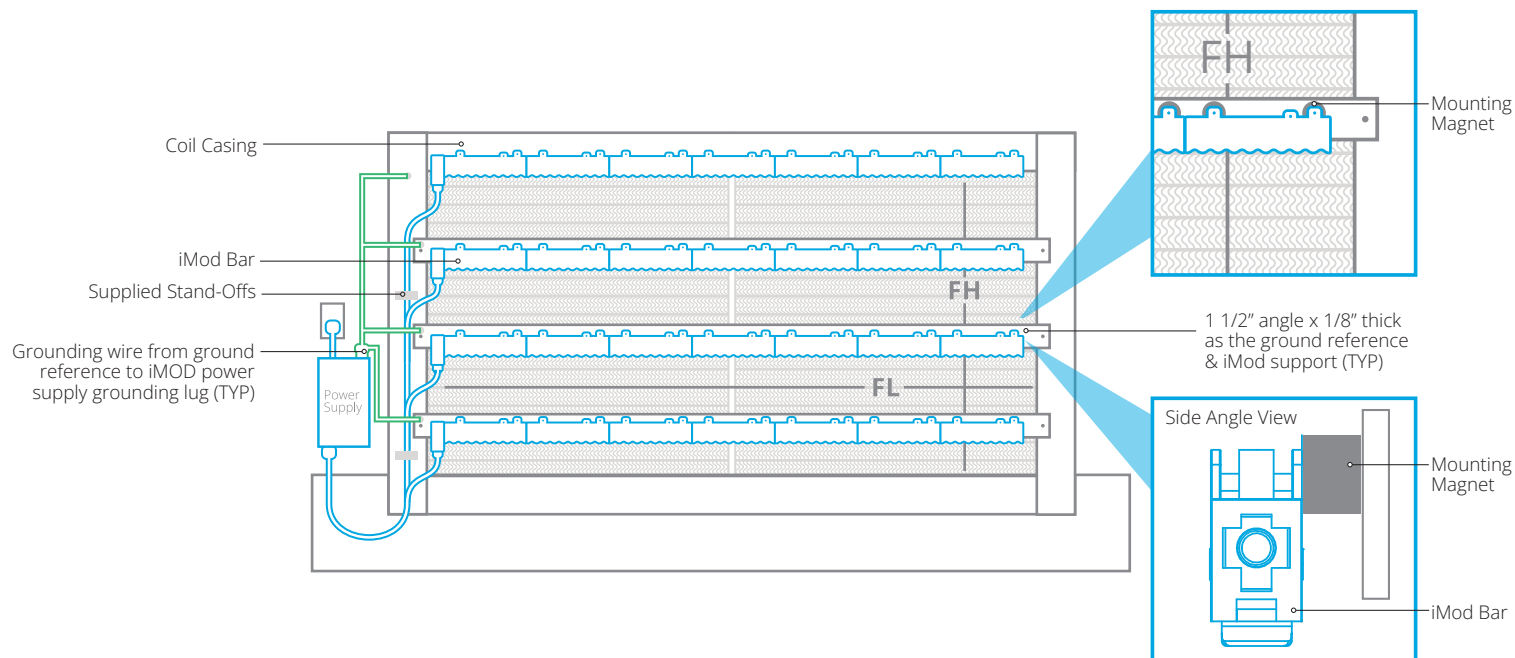


Figure 13.

SINGLE COOLING COIL - HEAVY ODOR CONFIGURATION

Finned Length (FL) >144" & <288"

Finned Height (FH) >60" & <120"

Sizing requires HVAC unit coil quantity and each Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

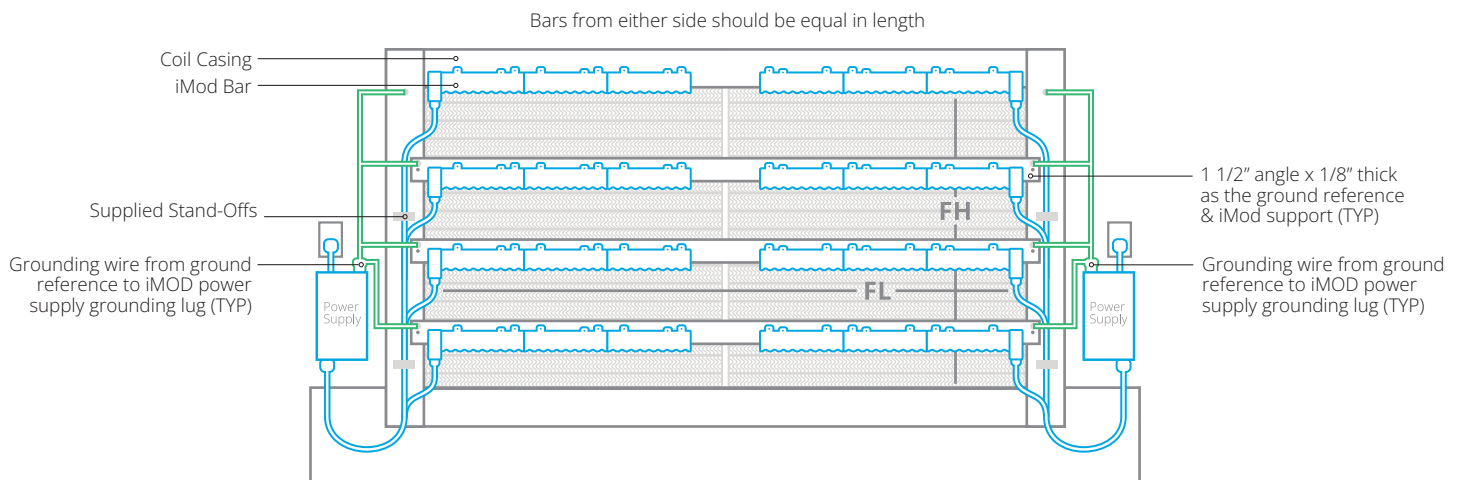


Figure 14.

STACKED COOLING COIL - HEAVY ODOR CONFIGURATION

Finned Length (FL) <144"

Finned Height (FH) <60"

(per coil)

Sizing requires HVAC unit coil quantity and each Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

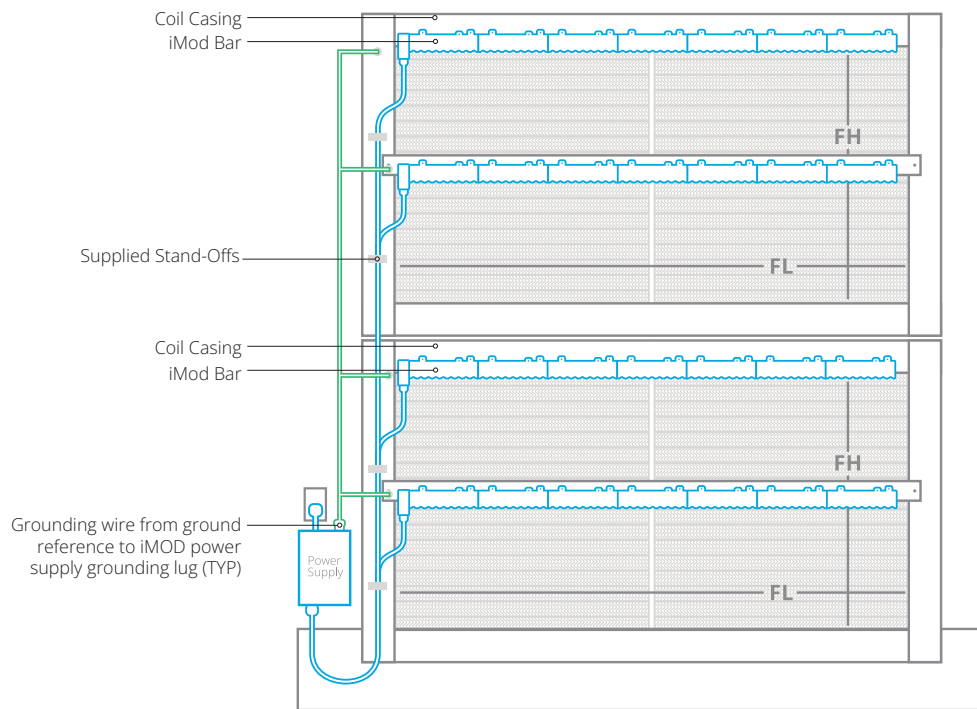


Figure 15.

STACKED COOLING COIL - HEAVY ODOR CONFIGURATION

Finned Length (FL) >144" & <288"

Finned Height (FH) <60"

(per coil)

Sizing requires HVAC unit coil quantity and each Coil Finned-Height (FH) x Finned-Length (FL)

UNIT TAG _____

FH _____ FL _____

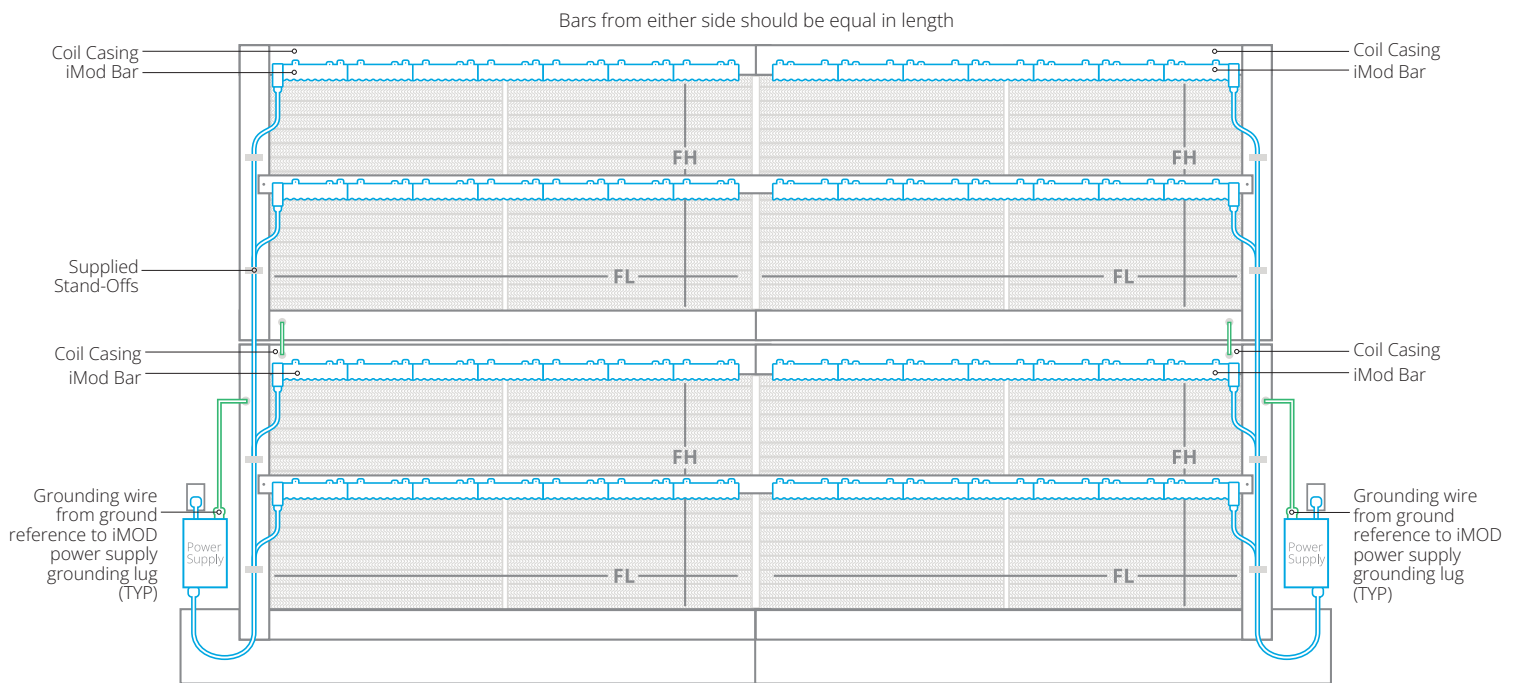


Figure 16

For coil configurations not shown here, please contact: techsupport@gpsair.com