AIRPHXIDU 250K Quick Reference Guide



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1 Important Safety Instructions



- 1. CAUTION: The IDU 250K contains a plasma core with a glass element. Please handle it with care.
- 2. WARNING: Do NOT install the IDU 250K if the unit has signs of damage. Doing so may put you at RISK OF ELECTRICAL SHOCK.
- 3. WARNING: Do NOT defeat the front cover interlock (safety switch). Doing so may put you at RISK OF ELECTRICAL SHOCK.
- 4. The IDU 250k is suitable for dry locations ONLY. Do NOT use outdoors, and do not expose to liquids. High moisture levels may damage the unit's plasma core.
- 5. WARNING: Do NOT modify the unit in any way. Doing so may put you at RISK OF ELECTRICAL SHOCK.
- 6. Modifying the unit will void the warranty.
- 7. WARNING. Do not remove the inner electronics cover. Doing so may put you at RISK OF ELECTRICAL SHOCK.
- 8. Use the provided mounting hardware or equivalent.
- 9. WARNING: Do not operate the unit if it has a damaged power cord. Doing so may put you at RISK OF ELECTRICAL SHOCK.
- 10. Do not stretch the power cord or place it under strain.
- 11. The use of an electrical extension cord is not permitted.
- 12. WARNING: Do not try to repair a damaged unit. Doing so may put you at RISK OF ELECTRICAL SHOCK.
- 13. WARNING: This equipment has a grounding-type plug with a third (grounding) pin to reduce electrical shock. This plug will only fit into grounding-type power outlets. If the plug does not fit into the outlet, contact a qualified person to install the proper outlet. Do not alter the plug in any way.

Note:

This product complies with the maximum allowable concentration of ozone of 0.050 parts per million by volume (ppmv) in a 24-h period.

The 8-hr TWA Ozone for this product is 0.000 ppmv when tested in a 30 m3 chamber

If further assistance is required, please contact your AIRPHX representative at 855- 424-7749 or visit our website https://www.airphx.com/FAQs, where additional information can be found, including user guides as well as helpful videos.

2 Overview

This quick reference guide briefly overviews the IDU 250K operation and the unit's status indicators. For more detailed information about the operation of the IDU 250K, please download the user guide at www.airphx.com/products.

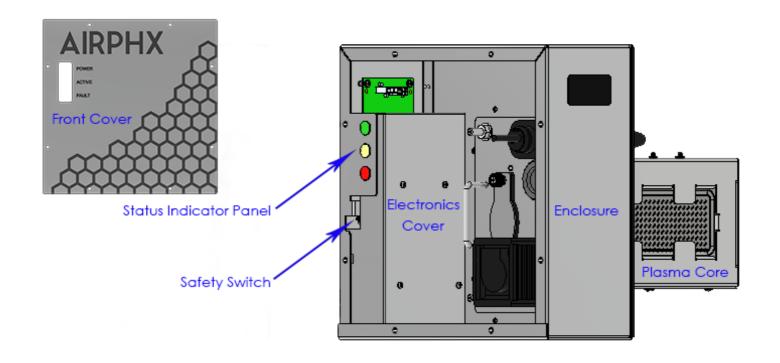
Specifications

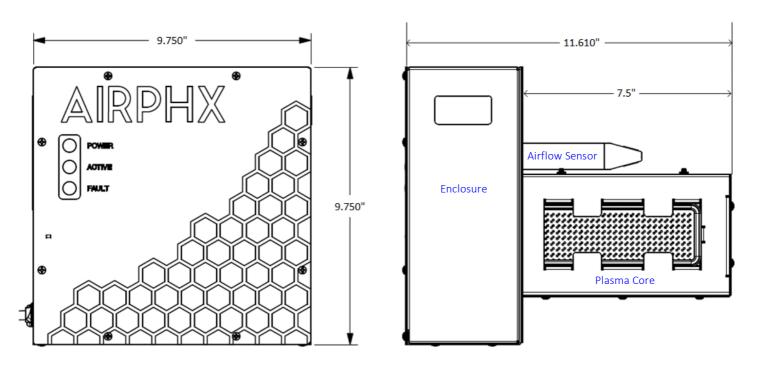
Mounting Details	Induct
Duct cutout size	6 inches round hole
Mounting depth (into duct)	7.5 Inches
CFM	400 – 2,000
Minimum airflow (Linear feet per minute)	300 LMF*
Tonnage	2.0 – 10-ton unit
Power (VAC)	80 - 260
Frequency	50/60 Hz
Watts	120
AMPs	1.0 at 120VAC
Weight	5 lbs.
Height (enclosure)	9.5 inches
Width (enclosure)	9.5 inches
Depth (enclosure)	4 inches

^{*} The IDU 250K requires a minimum of 300 LFM to operate.

Note: Coverage capacity can vary by location based on several factors, including duct layout, air circulation, damper controls, fresh air exchange rate, airflow, and bioburden. Contact an AIRPHX representative to discuss capacity at your particular location.

3 Unit Overview





FRONT VIEW SIDE VIEW

4 Modes of Operation

The IDU 250K has two modes of operation.

Active Mode

In this mode of operation, the IDU 250K will work in conjunction with the fan in your HVAC system. The unit will run continuously, producing oxidizing molecules, as long as sufficient airflow is present. The unit will switch from run to standby mode once the airflow stops.

Standby Mode

In standby mode, the IDU 250K is on, but it is not producing oxidizing molecules.

Conditions that can cause the IDU 250K to go into standby mode:

- > Lack of airflow.
- > Detection of a fault.
- > The HVAC fan is off.

Fault

If a fault is detected, the IDU 250K will go into standby mode.

Conditions that can cause the IDU 250K to go into fault:

- Main circuit board failure.
- Removal of the front cover.

Note: Solving the fault issue will automatically clear the fault condition allowing the unit to resume operation.

Fault example:

Powering on the IDU 250K with its cover removed results in a fault. Replacing the cover will automatically clear the fault. The unit will resume operations once airflow is detected. No further actions are required.

Note: The IDU 250K runs automatically based on the airflow within the duct system. i.e., if your HVAC system is running, the IDU 250K will be running and producing oxidizing molecules.

5 Operations & Controls

On/Off Switch

The On/Off switch switches the power of the IDU 250K on and off. The power switch is located on the left side of the unit.

Markings on the switch represent the operation of the switch.

I – Indicates ON

O – Indicates Off

6 Indicators

The IDU 250K has three indicators on the unit's front cover. Each indicator represents a condition/function and operates independently of the others.

Power Indicator

The green power indicator will illuminate, indicating the unit has power.

Active Indicator

The yellow active indicator will illuminate once the unit detects the minimal required airflow and is in active mode.

Fault Indicator

The red fault indicator will illuminate if a fault is detected.

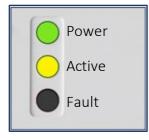
7 Indicator Panel

Standby Mode



This is an indication that there is power and that the IDU 250K is switched on. There is no airflow and no fault is detected.

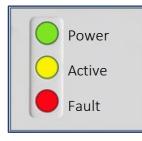
Active Mode



This is an indication that there is power, the IDU 250K is switched on, airflow is detected, and no fault is detected.

Note: The yellow active indicator will illuminate for one minute during the startup cycle. It will turn off and re-illuminate once airflow is detected.

Fault Detected



This is an indication that there is power, the IDU 250K is switched on, there is airflow, and a fault was detected.

Please refer to the IDU 250K User & Installation Guide for further details.

If further assistance is required, please contact your AIRPHX representative at 855-424-7749 or visit our website https://www.airphx.com/FAQs, where additional information can be found, including user guides as well as helpful videos.