



Ionization Products

August 18, 2021



Agenda

2

- RTU/AHU products
- Duct mounted devices
- Room/Stand alone device
- Sensing product
- Products with iAIRE patented technology



RTU/AHU products

3

- Ion block
 - Installed in
 - AHU
 - RTU's
 - VRF
 - Ductless splits
 - Can handle up to a 2,500 CFM per block in standard environments
 - iAIRE ion block has similar ion output to GPS-48
 - Smoking/kitchen environments should only utilize ½ the rated CFM
 - 24 V, 115 V, 230 V power





RTU/AHU products

- Ion kit
 - iAIRE will provide the appropriate # of ion blocks, mounting brackets, screws and a VOC sensor for field installation in customer HVAC units from 2 – 200 tons.





RTU/AHU products

5

- Ion installation
 - iAIRE will install the Ion Kit into a customer provided unit.
 - Units are 2 – 60 tons

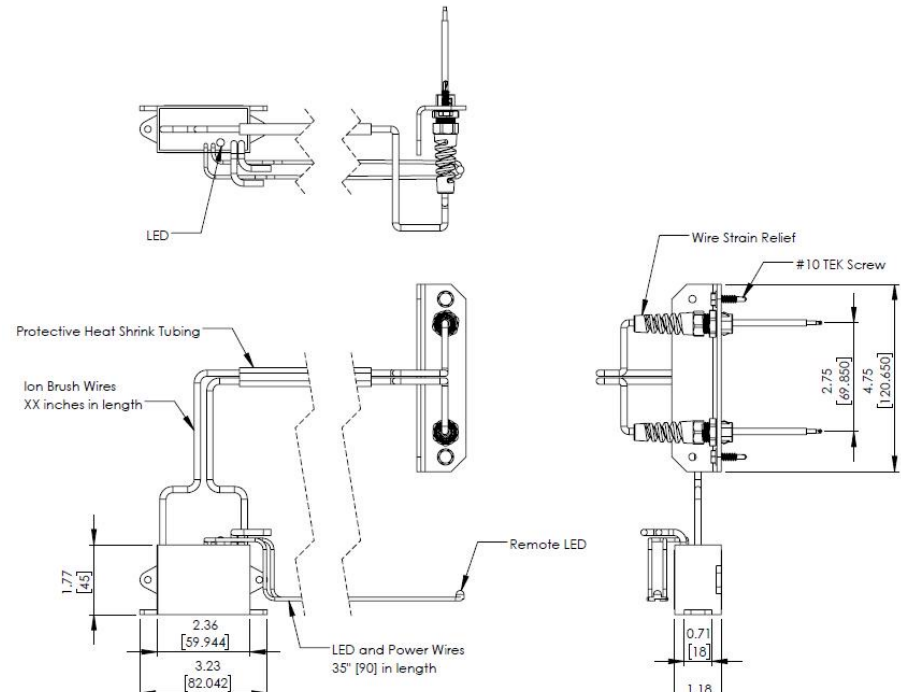




Duct mounted devices

6

- Ion Duct
 - Designed to be installed in ductwork or into a blower housing
 - 5–30 V, 208/230 V
 - Single iAIRE block has same ion output as GPS-48
 - Product is 78% Made in the US and complies with the Made in America Act

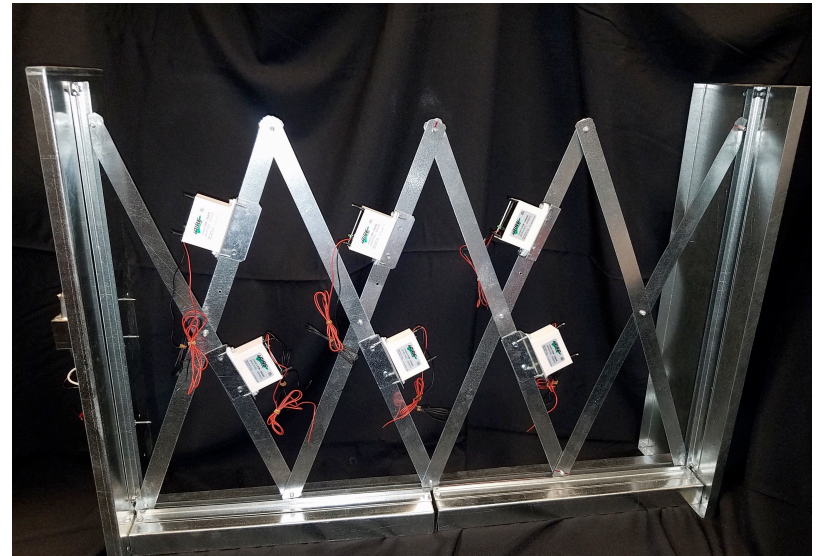




Duct mounted devices

7

- Ion array
 - Designed to be installed in ductwork
 - 2 stock grid sizes
 - 1 - 6 blocks
 - 6 – 13 blocks
 - Custom arrays can be sized for any size duct or CFM
 - VOC sensor included to provide feedback letting you know ionization is working
 - Can work from 115 – 460 V





Room/Standalone Products

- Stand alone Purifier
 - Designed to plug into a standard wall outlet
 - Product is 61% Made in the US and complies with the Made in America Act
 - Quiet fans
 - Portable
 - Built to clean between 3,000 – 9,000 cubic feet of space
 - Can add hanging kit (usually used for basement or crawl space when dealing with Radon)





Room/Standalone Products

9

- Ceiling Diffuser
 - Designed to drop into a 2 x 2 ceiling grid
 - Multiple fan sizes
 - Quiet fans
 - Not tied to HVAC system
 - Built to clean between 3,000 – 9,000 cubic feet of space

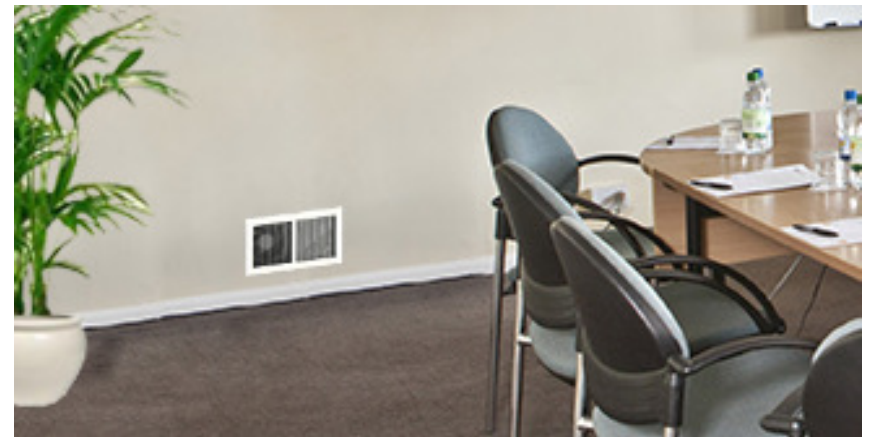




Room/Standalone Products

10

- Register Purifier
 - Designed to fit into 2 x 4 stud wall
 - Multiple fan sizes
 - Quiet fans
 - Not tied to HVAC system
 - Built to clean between 3,000 – 9,000 cubic feet of space





Standalone Products

11

- Clip on purifier
 - Designed to clip onto fan
 - Normally for the fire/disaster restoration market
 - Clean airs
 - Eliminates odors
 - Comes with “piggy back” plug so multiple units can be tied together



- Space VOC sensor
- This lets customers know if the air is clean or dirty
- Better method to assure space is clean than measuring ions



- Duct VOC sensor
- This lets customers know if the air is clean or dirty
- Better method to assure space is clean than measuring ions



- Space CO₂ sensor
- This lets customers know occupancy in the space



- Space Particulate (PM) sensor
- This lets customers know amount of specifically sized particles in the space



- Duct Particulate (PM) sensor
- This lets customers know amount of specifically sized particles in the space



- Space IAQ sensor
- Includes
 - VOC
 - CO₂
 - PM
 - Temperature
 - Humidity
- This lets customers know total air quality in the space



- Duct IAQ sensor
- Includes
 - VOC
 - CO₂
 - PM
 - Temperature
 - Humidity
- This lets customers know total air quality in the space





Patented technology

19

- Controls package
 - Package includes
 - economizer controller
 - Ion blocks
 - CO₂ sensor
 - VOC sensor
 - 3 standard sizes
 - 2 - 6 ton
 - 6 - 15 ton
 - 15 - 30 ton
 - Provides feedback and damper control to maintain appropriate amount of outside air in monitored space
 - Have ability to tie to Carrier RTU-Open controller



- Field installed economizer packages
 - Package includes
 - Economizer damper
 - 24 V actuator motor with feedback
 - economizer controller
 - Ion blocks
 - CO₂ sensor
 - VOC sensor
 - Sized for 2 - 25 ton units
 - Manufacturers includes:
 - Carrier
 - Trane
 - JCI/York
 - Lennox





Patented technology

21

- Since iAIRE's patent is a process patent, iAIRE would be able to work out a licensing agreement to allow this methodology to be used on someone else's controller or building management system.