Arctica Intelligent Ventilator (IV50), Gen 1.0 Product Data Sheet

90% Heat Exchange Efficiency

Up to 90% HRV/ ERV / heat exchange efficiency using a bi-directional fan which continuously charges and discharges the IV50 ceramic core with heat / energy from the ventilated space over a repeating 140 second ventilation period (Step 1, Step 2, repeat).

Flow Rate of up to 40 CFM

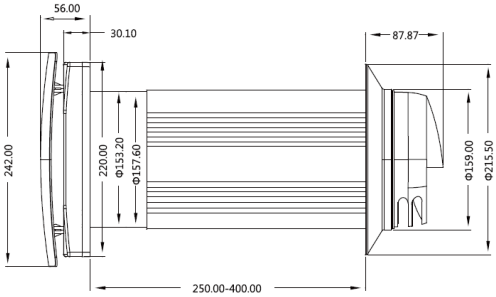
Three user adjustable volumetric flow rate setting (28, 32 and 40 CFM) for ventilation (exact rate dependent on filter mode).

Built In Air Filtration

User serviceable filter options remove dust and particulate from incoming air while removing indoor air quality pollutants (CO2, VOC, PM2.5) through targeted ventilation.

Easy Installation & Low Energy

Power through 120V AC wall plug or direct connection to building AC wiring. Max power draw of 6W at highest speed setting.



Overall Dimensions (mm) Side View

Remote Control

How the IV50 Heat Recovery Cycle Works

Step 1:

Warm 68 F air is drawn from the living space for 70 seconds and ventilated to the 14 F outdoors. Heat is stored in the IV50 thermal core as exhaust air leaves the IV50 at 20F.

Step 2:

Cool 14 F air is drawn from the outdoors, filtered and heated by the charged core back to ~62 F for 70 seconds. Heat is removed from the IV50 thermal core to warm the incoming outdoor air from 14 F to a heat recovered air temperature of 62 F.