



Micro-scale Carbon Capture Unit (MCCU)

The objective of this system is to reduce energy needs and carbon emissions while maintaining equipment operations for commercial mechanical rooms. Our system has been independently verified to demonstrate a 20% reduction in overall carbon emissions through heat recovery and direct carbon capture.

Capture and Conversion Technology

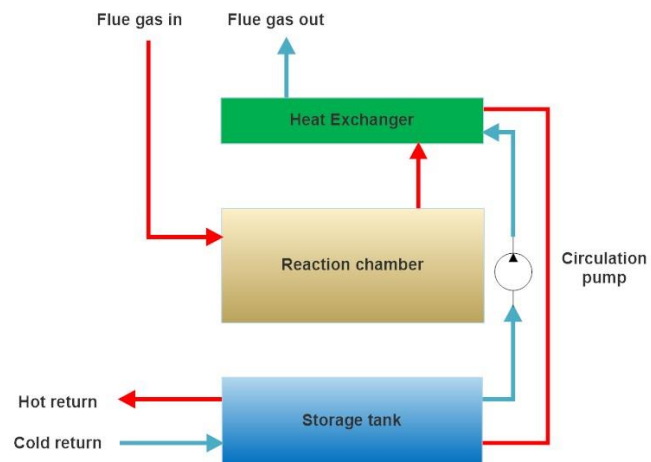
The CarbinX[™] not only reduces carbon emissions and reduces your energy bill, it also produces a valuable by-product we use in our products we sell across a variety of industries. The profits from the sale of our products are then shared with our customers to provide an accelerated return on their investment. Once our customers have recovered their full investment the rebate will come to an end.

A simple and elegant solution

By diverting a portion of your waste carbon emissions from your heating appliances through our patented CarbinX technology, you can reuse the waste heat and combine it with the heat that is generated from the carbon capture process (exothermic) and reduce the amount of gas needed to meet your buildings energy needs. Municipal water temperatures range between 7 to 10 degrees Celsius and by using our system, we can increase that temperature to 20 to 30 degrees Celsius.

Safety and reliability

The CarbinX technology is **CSA/UL** listed and is designed to run along side your existing heating systems. If our CarbinX should fail for any reason, it would have no effect on the operation of your other heating appliances. The system has several safety features, including a reaction chamber door interlock and an internal monitoring system that shuts down should the reaction temperature exceed design parameters.



The Internet of Things (IoT)

Each CarbinX comes with an IoT platform that helps us better understand how your heating system functions. The data we generate looks at equipment run time, chemical processing, and temperature differentials. We can also look at data that is being generated from your heating equipment 24 hours a day and can report to you or your HVAC contractor with any issues that may arise.

Specifications

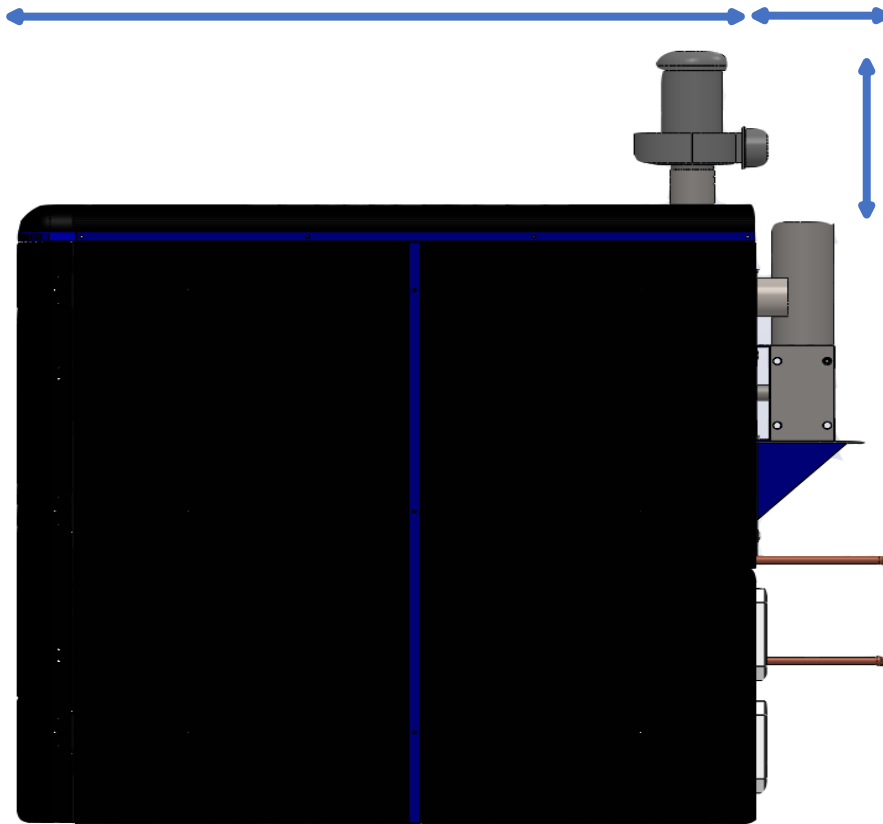
Dimensions	33" (W) x 78" (D) x 74" (H)
Weight (Not in service)	480 kg
Power	208 VAC 3 phase 8 Amp (15 Amp service) 120 VAC single phase 5 Amp (15 Amp service)
Water line sizing	0.75 " inlet/outlet copper (Type L)
Venting sizing	4" inlet/outlet
Venting material	316 Stainless
Max temp (inlet)	200F
CO2 concentration	4000 ppm to 50,000 ppm
Heating appliance input rating	250,000 BTU to 1.5M BTU
Operating environment	Must be installed where the unit will not freeze or be exposed to moisture
Internet of Things (IoT)	Internal mobile cellular 2.4Ghz to WLAN
Agitation parameters	1.5HP to 100:1 gear ratio. 250 ft/lb torque

Version 3.3 - 60 inches : Version 3.4 - 58 inches

Version 3.3 - 12 inches
Version 3.4 - 18 inches

Version 3.3 - 72 inches : Version 3.4 - 68 inches

Version 3.3 - 14 inches
Version 3.4 - 24 inches



Minimum clearance
36 inches/92 cm

Minimum clearance
36 inches/92 cm



Minimum clearance
8 inches/20 cm

Version 3.3 - 33 inches
Version 3.4 - 30 inches

Minimum clearance
8 inches/20 cm