OPTIONAL CO_2 ENRICHMENT

CO₂ ENRICHMENT OPTION *(side tab)*

GROW ROOM CO_2 ENRICHMENT OPTION

Many grow room operators seek to supplement the carbon dioxide levels in their facilities during lights-on modes to improve the growth rates and qualities of crops. One of the key functions of Desert Aire's GrowAire™ Environmental Control Systems is to serve as an air handler. Because this function provides an excellent method to disperse supplemental CO_2 throughout grow rooms, Desert Aire has added a CO_2 Enrichment Option to the indoor installation configurations of GrowAire™ Systems.

CO_2 ENRICHMENT REQUIREMENTS

The customer will supply a CO_2 tank as the source of the gas and connect it to the GrowAire™ System via the factory-supplied hose. When the CO_2 level drops below the controller programmed set point, the internal solenoid valve will open until the set point is achieved. The operation is internally coordinated with the photo-period command such that CO_2 is enriched only during the lights-on mode of operation. If connected to a Building Automation System the CO_2 setpoint can be adjusted from the BAS interface.
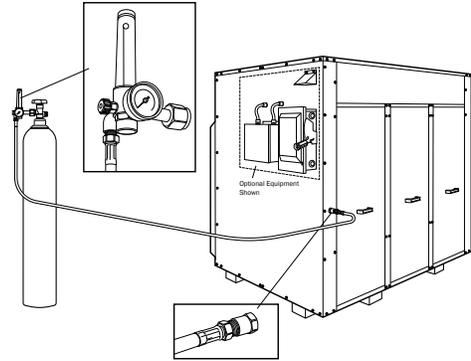

Optional Equipment Shown

Figure 1 - GrowAire™ System CO_2 Enrichment Components

The sensors are installed on grow room walls at plant canopy heights to measure CO_2 levels at locations closest to plants. Installations can include a single sensor or up to 4 sensors where the CO_2 signal is averaged by the controller. The range of sensors is 0 to 5,000 ppm.

A high CO_2 level alert can be programed to provide a contact closure to an audible and/or visual alarm supplied by other vendors. The alert can also send a message to specified users of a Desert Aire AireGuard™ system if equipped and setup by the Site Administrator.*

CO_2 ENRICHMENT OPTION COMPONENTS

The table below lists what is included with the purchase of Desert Aire's CO_2 Enrichment Option.

Components	Included
Gas flow regulator (field installed)	Yes
Unit bulkhead fitting	Yes
Unit installed control valve	Yes
10' hose	Yes
Unit controller display panel	Yes - CO_2 ppm
High Alarm (contact closure)	Yes
Wall mount CO_2 sensors	1 to 4 Available

* Note: The high CO_2 level alert is not a listed safety device. The equipment cannot detect CO_2 levels outside of the grow room. The customer/end user is responsible for ensuring safe levels of CO_2 throughout their buildings; for all safety devices and controls required by local authorities and insurance companies; and for compliance with all applicable regulations.

OPTIMIZING SOLUTIONS THROUGH SUPERIOR DEHUMIDIFICATION TECHNOLOGY

⚠ **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov