Product Specs

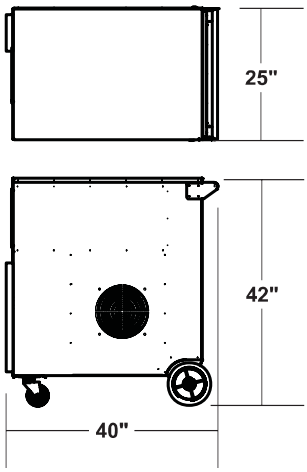
Drying Environment Control Unit

DECU1000

- **HEPA Filtration & Decontamination**
- **Controlled Heating & Drying**
- **Humidity Control**

The DECU1000 is a fan-coil type liquid-to-air heat exchanger with high efficiency air filtering capabilities and a full, versatile control system.

For drying application, the DECU1000 can be connected to any of DRYAIR's Central Heating Modules.



Features

- Temperature controls can sense temperature of either the supply air stream or the return air stream and can be selected at the flick of a switch. This allows versatile setup on different DECU applications (ie: structure pressurization or circulation within a structure)
- Blower speed and air flow will continue even when heat is not being called for.
- A differential air-pressure gauge indicates reduced airflow due to dirty filters. By replacing the 2 pre-filters frequently, the life of the other more expensive filters will be prolonged. Utilize all 4 filters at once or, if not required, certain ones can be removed.
- The relative humidity low limit can be selected. If the RH level of the return air stream should get down to the set point, the heat supply will be shut off while the blower will continue to run. When the sensed RH level rises above the low limit set point, heat will be allowed to come back on.
- Stainless steel cabinetry... the system can be washed-down between uses and can be used indoor or outdoors.

Specifications

Blower .....Backward inclined centrifugal impeller
.....Variable speed control, high static pressure blower allows for duct connections on return air side and/or supply air side
.....1,000 CFM nominal air flow (at full blower speed, with clean filters)
Motor .....External rotor type, 1.45 HP, 9.4FLA
Electrical
System requirements .....115V, single phase, 60Hz, 15A, standard plug
Control circuitry 24V
Fluid circulation features
Coil
Physical properties .....4-row copper tube, aluminum fin
Circulation .....single supply & return
Fluid connection .....3/4" hydraulic style quick-couplers
Circulation lines
Fluid lines .....300 P.S.I. heavy-duty "Explorer Air" hose, 3/4" I.D. x 50' (15.2 M)
Couplers .....3/4" hydraulic style quick-couplers
Filtration .....Multi-level, bank of 4 media filters
1st filter .....1" thick, conventional throw-away
2nd filter .....4" thick, pleated, MERV 8 rating
3rd filter .....4" thick pleated, activated carbon, capable of removing gaseous airborne odors
4th filter .....12" thick HEPA filter, capable of removing 99.99% of airborne particles as small as 0.3 microns in diameter.
Ultra violet light .....Optional, used to sanitize the air stream of biological impurities.

DECU1000 HEAT EXCHANGE (BTU/H OUTPUT)

Results are with 6 GPM fluid flow, utilizing 50% propylene glycol / 50% water

Ambient Air Temperature	150°F (66°C)	160°F (71°C)	170°F (77°C)	180°F (82°C)	190°F (88°C)	200 (93°C)	210 (99°C)
-40°F (-40°C)	132,390	142,840	153,180	163,410	173,550	183,600	199,580
-20°F (-29°C)	116,140	125,800	135,400	144,950	154,430	163,870	173,150
0°F (-18°C)	100,380	109,350	118,310	127,230	136,140	145,020	153,870
20°F (-7°C)	85,117	93,470	101,850	110,230	118,610	126,980	135,300
40°F (4°C)	70,370	78,180	86,030	93,910	101,820	109,740	117,510
60°F (16°C)	56,160	63,470	70,840	78,260	85,720	93,220	100,530
80°F (27°C)	42,460	49,300	56,220	63,210	70,250	77,330	84,220
100°F (38°C)	29,310	35,690	42,160	48,720	55,330	61,960	68,500
120°F (49°C)	16,870	22,800	28,830	34,950	41,040	47,320	53,480

Supply Fluid Temperature

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