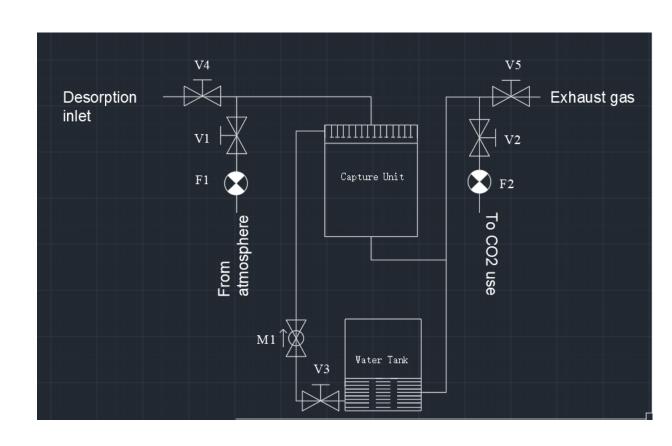
Installation of module: the adsorption/desorption blocks are loaded into the Column from the left 4 by hanging on the track. Then Close the column tightly. At start, all the valves, pumps and fans are closed.

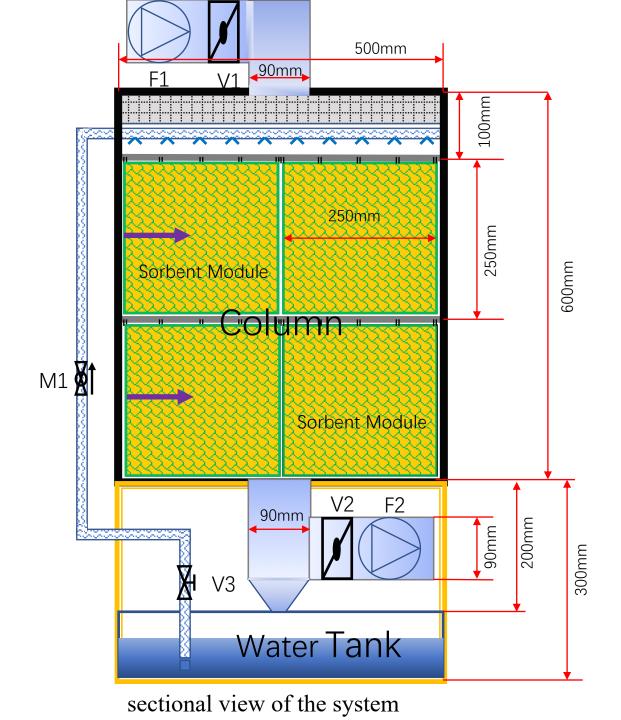
Adsorption: Close Valve2 (V2) and Valve4 (V4). Open valve1 (V1), valve 5 (V5) and fan1 (F1). Blowing air into the column, the adsorption blocks adsorb for 40-60 minutes. Exhaust gas is released back to atmosphere. Then close V1, V5 and F1 for the next process.

**Desorption:** Open the M1 and V3. The water sprays from the top of capture unit for 3-5 minutes. The blocks begin to release CO2 the water flowing in to water tank.

Open V2, V4 and F2 and close the M1 and V3. The gas with high CO2 concentration is introduced into the use end (e.g. greenhouse) for 30-40 minutes. The inlet of V4, desorption inlet, could be connected with the greenhouse. Then close V2, V4 and F2 for the next cycle.

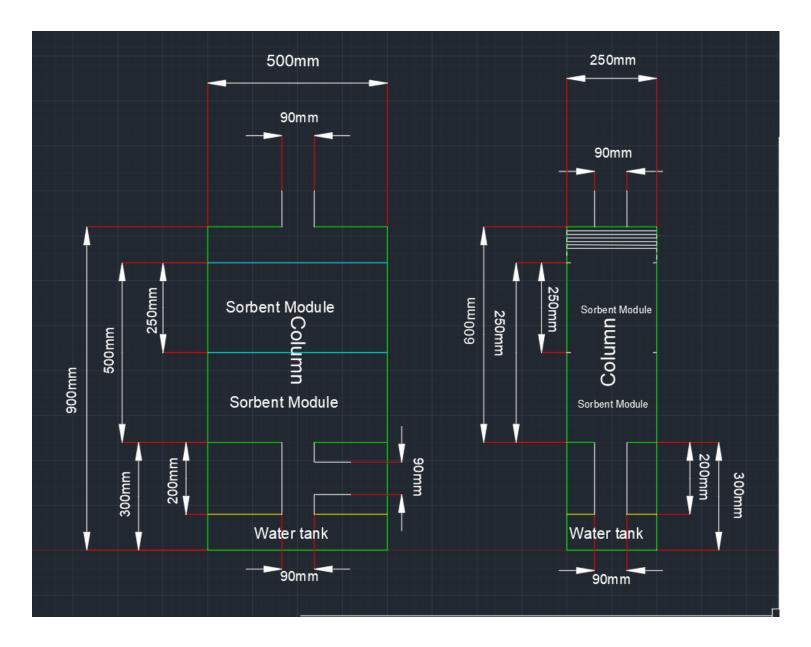


Flowsheet of the moisture swing DAC system



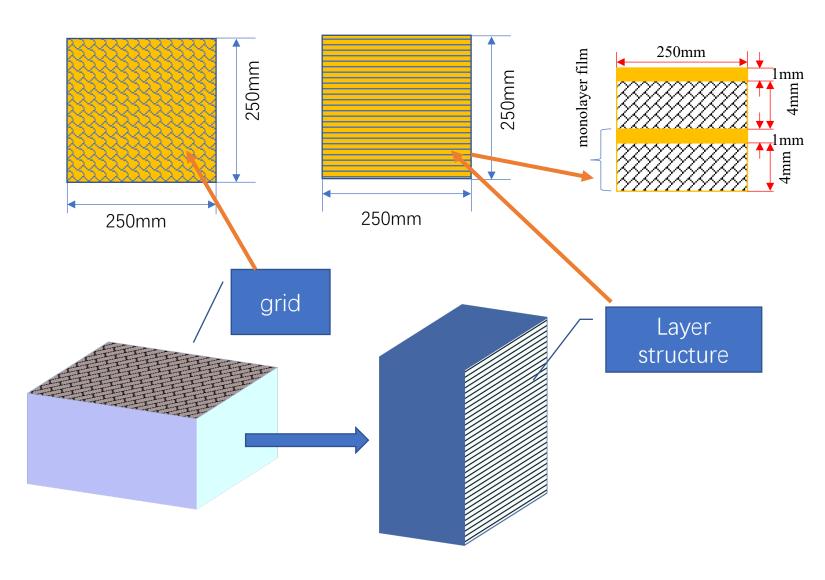
90mm 250mm 100mm  $\otimes$ 250mm Sorbent Module Column Sorbent Module 90mm 200mm 90mm 300mm Water Tank

sectional installation view



Sectional view of the system

Sectional installation view



Sorbent modules (4 groups)
Single group size: height\*length\*width= 250\*250\*250mm