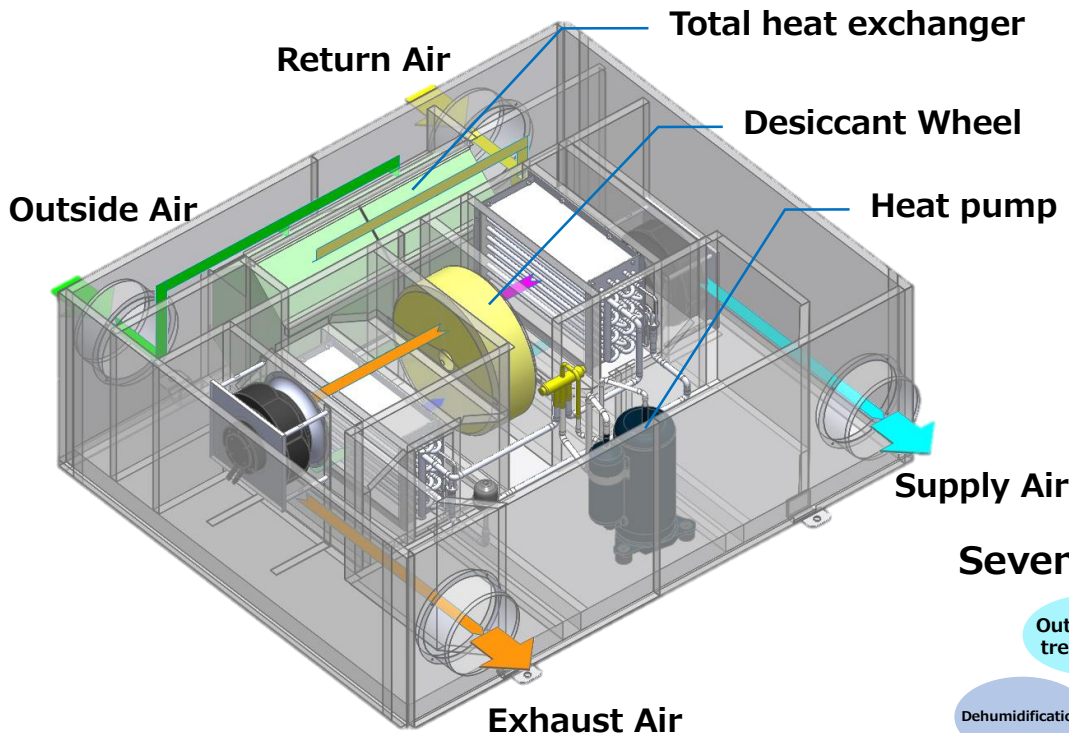


# Multi-desiccant air conditioner with built-in heat pump

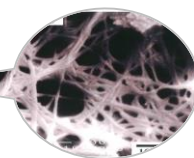
This unit provides ventilation and humidity control with small energy.



We use the high efficiency dehumidifying agent "Sponge-like Titanium Oxide" for desiccant wheel.

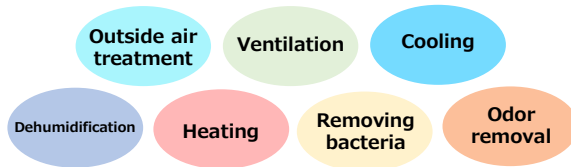


Sponge-like Titanium Oxide



Magnification : 100,000 times

## Seven functions in one unit



**Desiccant Mode**  
 Dehumidification Volume : 6.36kg/h  
 Total heating Capacity : 5.2kW (COP5.2)

※Conditions

Outside Air : 95.0° F、56%RH、20.0g/kg'  
 Indoor Air : 78.8° F、50%RH、10.5g/kg'

**Heating Mode**  
 Total heating Capacity : 6.0kW (COP6.0)

※Conditions

Outside Air : 32.0° F、50 %RH  
 Indoor Air : 71.6° F、50 %RH

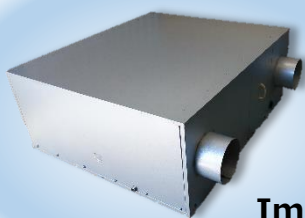
## Air conditioning that separates latent heat and sensible heat

Processing the latent heat (humidity) with the desiccant air conditioner

Processing the sensible heat (temperature) with the package-type air conditioner

## Energy saving and comfort

It is the system balancing comfort and energy saving by processing latent heat and sensible heat separately.

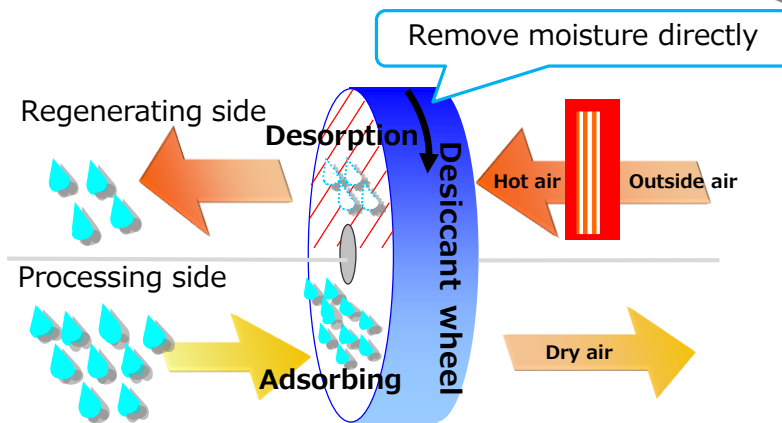
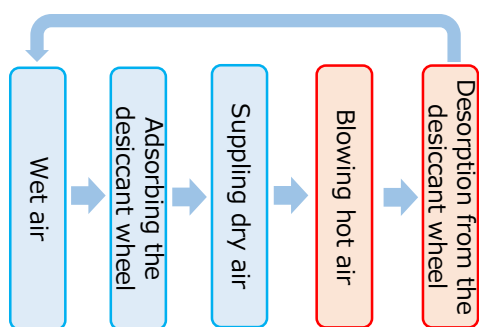


Improving comfort



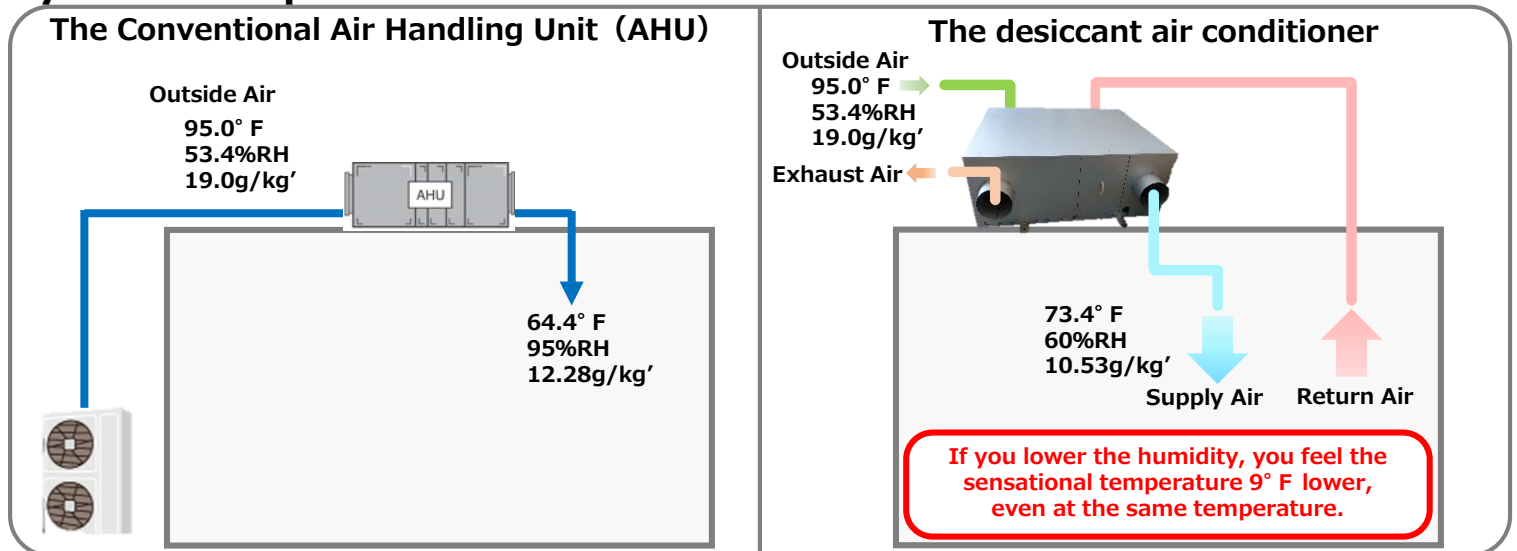
20 to 30% reduction in the number / capacity of package-type air conditioners

System dehumidifying by low-temperature heat (122 to 140° F)

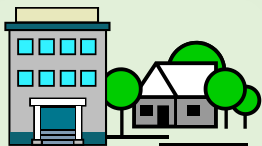
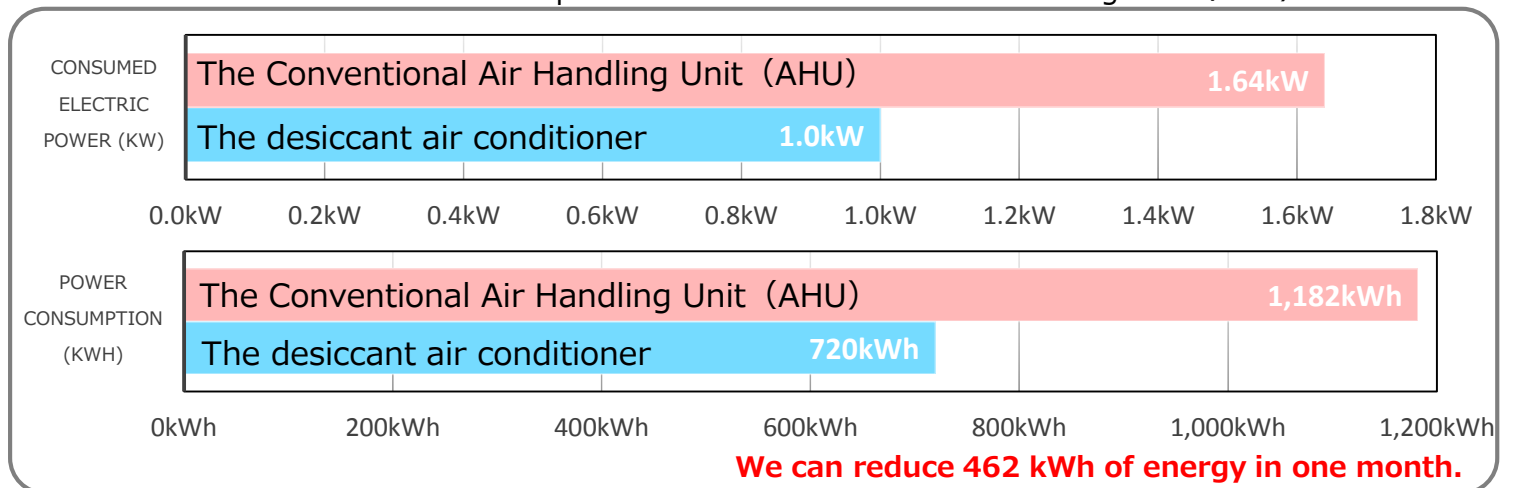


# Application Example

## System comparison



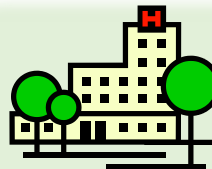
**Energy comparison** The desiccant air conditioner can reduce energy by about 40% compared to The Conventional Air Handling Unit (AHU) .



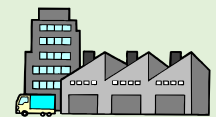
- Office building
- Educational institutions
- Housing
- Amusement facilities



- Supermarket
- Convenience store
- Restaurant



- Hospital
- Elderly care facility
- Food factory



- Clean room
- Pharmaceutical factory
- Research facility
- Precision instrument factory

## Unit specifications

Model	DC-AEX-05
Processing air volume	500m <sup>3</sup> /h
Dimensions(mm)	1,310(Wide) x 1,160(Depth) x 534(Hight)
Weight	214kg
Power supply	Single-phase 200V 50Hz/60Hz
Consumed electric power	1.0kW
Dehumidifying cooling capacity	5.2kW
Humidification heating capacity	6.0kW

