

## Instruction

Solar energy is popular now on the world as free power and many customers use solar power to dry goods on different market. Solar dryer should be good to use on place without electricity and use 100% power from sunshine without additional dry cost. But for some commercial dry projects and some goods need resistant dry as solar can not keep working. And some customers also use backup oil& gas or electricity directly as backup power with same problem for pollution or high dry cost.

Then we now design and combine solar+ heat pump dry to have the best result to use solar for 10-20% free and 80% more or less with heat pump to save more dry cost.

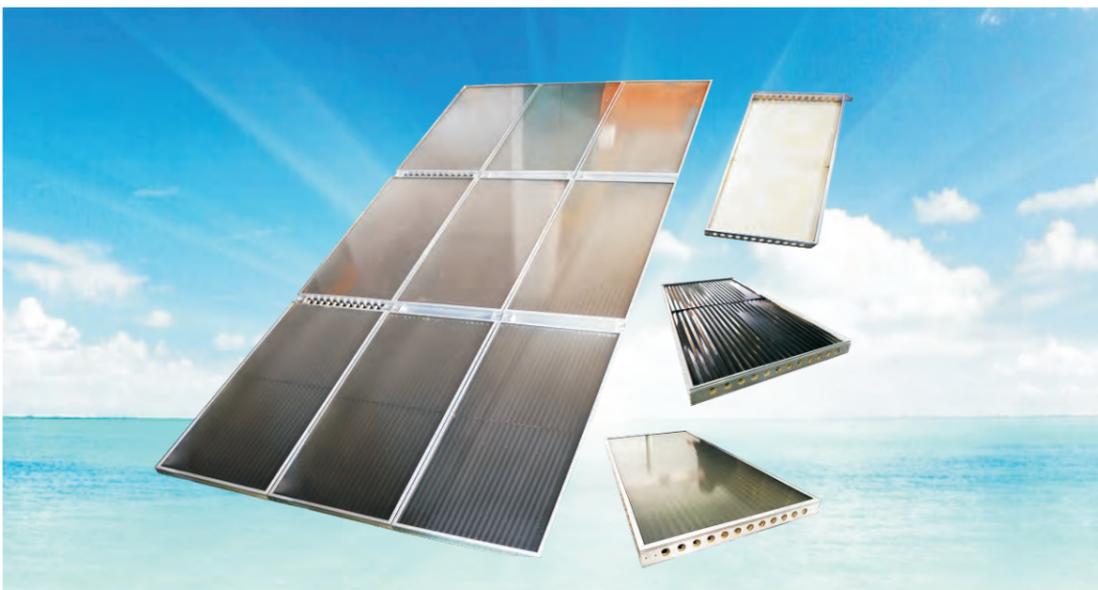
## Commercial Solar+ heat pump drying system

Solar+ heat pump drying system use more for commercial dry project (photos for reference) Some points need to care about before do solar + heat pump drying projects:

>> Need to check the space to install solar drying system. If have space as outer with sunshine ( no shadow), then we can check to install solar drying system. How many space decide how large solar drying system can install. Commonly solar drying system install on the roof of drying room to connect with drying room together.

>> Solar drying system powered by solar is only pending to save dry cost. When you calculate heat pump dry capacity, need to assure 100% power to dry all goods. Because if raining day without no solar, or weak sunshine, etc, then heat pump need to supply 100% power for dry projects. If no enough, then dry process should stop and influence quality of drying goods. Solar power only can save 20% or more on strong sunshine, less on weak sunshine or no on raining days.

1) Solar drying system consists of solar air collectors. The quantity of solar air collectors depends on the customer's needs, we have four common option (5 pcs, 9pcs, 6pcs, 10pcs) for choose. Of course, customer also can decide the quantity by themself.



Solar drying system have two installation way. One is put the solar drying system on the top of heat pump drying room. The another is using the bracket to install in other places. (pls. Refer to below photos)



The first installation way



The second installation way

2) Heat pump drying system, it is make up by heat pump dryer + drying room + trolleys + trays + all spare parts.



## Why use solar + heat pump drying system

Even solar is not stable, but solar power is 100% free and no pollution. If calculate with one year, we can calculate as average 280 days with 7 hours strong sunshine, and 80 days with weak or raining days, we still can have 6 KW/day x 280=1680KW one year for 1pc solar air collector.