Malnutrition Matters

FOOD TECHNOLOGY SOLUTIONS

3 HP Heat Pump / Solar Hybrid Food Drying System

This new system, developed by our SolarFlex fabrication partners at DryFree, combines the proven superior electrical heating efficiency of a heat pump with the solar air capability as a bonus. In addition to the two built-in solar air panels, a larger solar air heating array can be added to further expand the solar capacity and save more energy cost. In any case, the 3 HP heat pump provides enough drying power to dry up to 150 KG of wet food product per day, using 40 drying racks. Temperatures can be controlled up to 85C which is more than most foods require. This 220V system requires no installation services and is on sturdy castors to allow easy movement. This commercial hybrid unit is an excellent

complement to the SolarFlex all-solar options developed by MM. Basic 3 HP system price is \$5,900. Additional solar modules of 8 Sq. M with extra ducting and controls are approximately \$1,900.





Front of Heat Pump Dryer w 2 Solar Air Panels

Rear view with space for 40 drying racks with 2 racks per level on 2 sides





Optional array of 8 Sq. M solar air collectors for increase of 6 kW solar energy potential

Technical Parameters 3 HP Heat Pump / Solar Integrated Drying System

Power		220V/1Phase/50HZ
Compressor		ЗНР
		Fully enclosed scroll compressor
Evaporator		aluminium
Condenser		aluminium
Rated input power		3.5KW
Rated input current	А	13A
Maximum temperature / rated temperature	°C	85/80
Refrigerant Volume	KG	4
Ambient temperature	°C	>0
Size (L×W×H)	mm	2800x1100x2200
Insulation thickness	mm	50
Tray quantity	pcs	40
Tray size	mm	640x460x25
Tray material		aluminium
Equipment weight	KG	600
Noise in 1 meter	dB(A)	55
Exhaust Maximum temperature	°C	115
Exhaust pressure	Мра	≤2.35
Return air pressure	Мра	≥0.03

External Parts



Internal Parts

