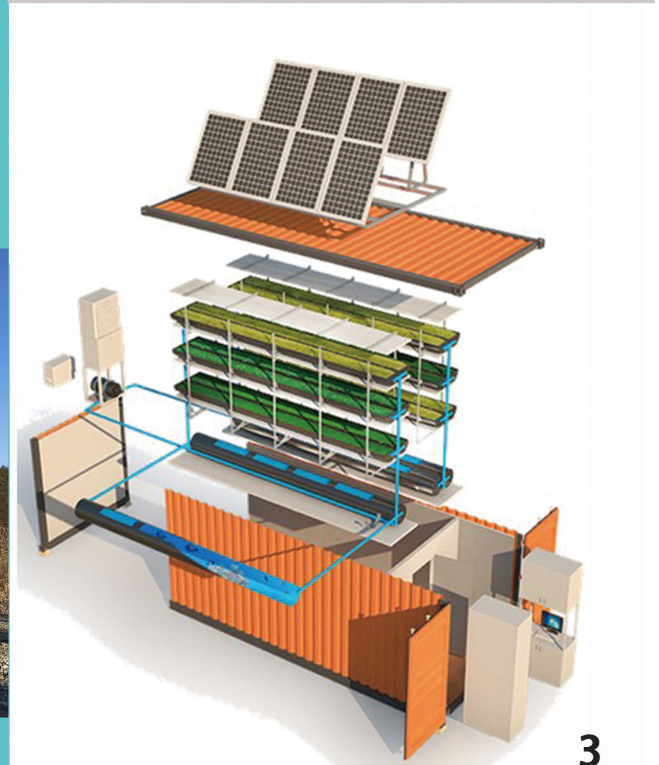


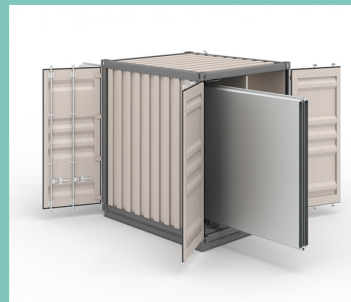
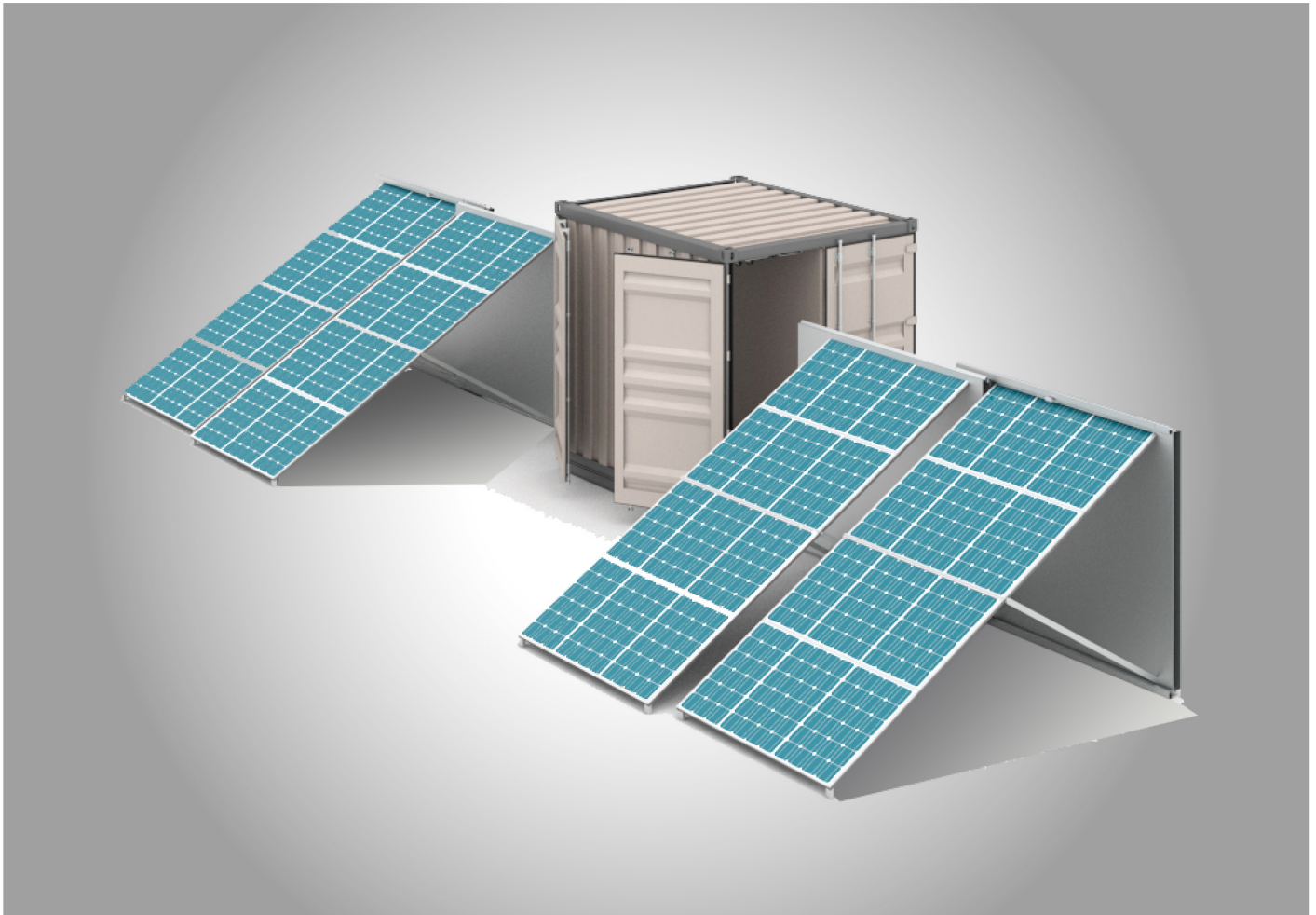
2022

RENEWABLE ENERGY PRODUCTS



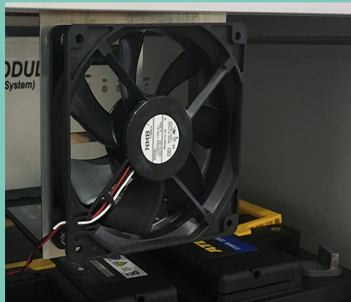
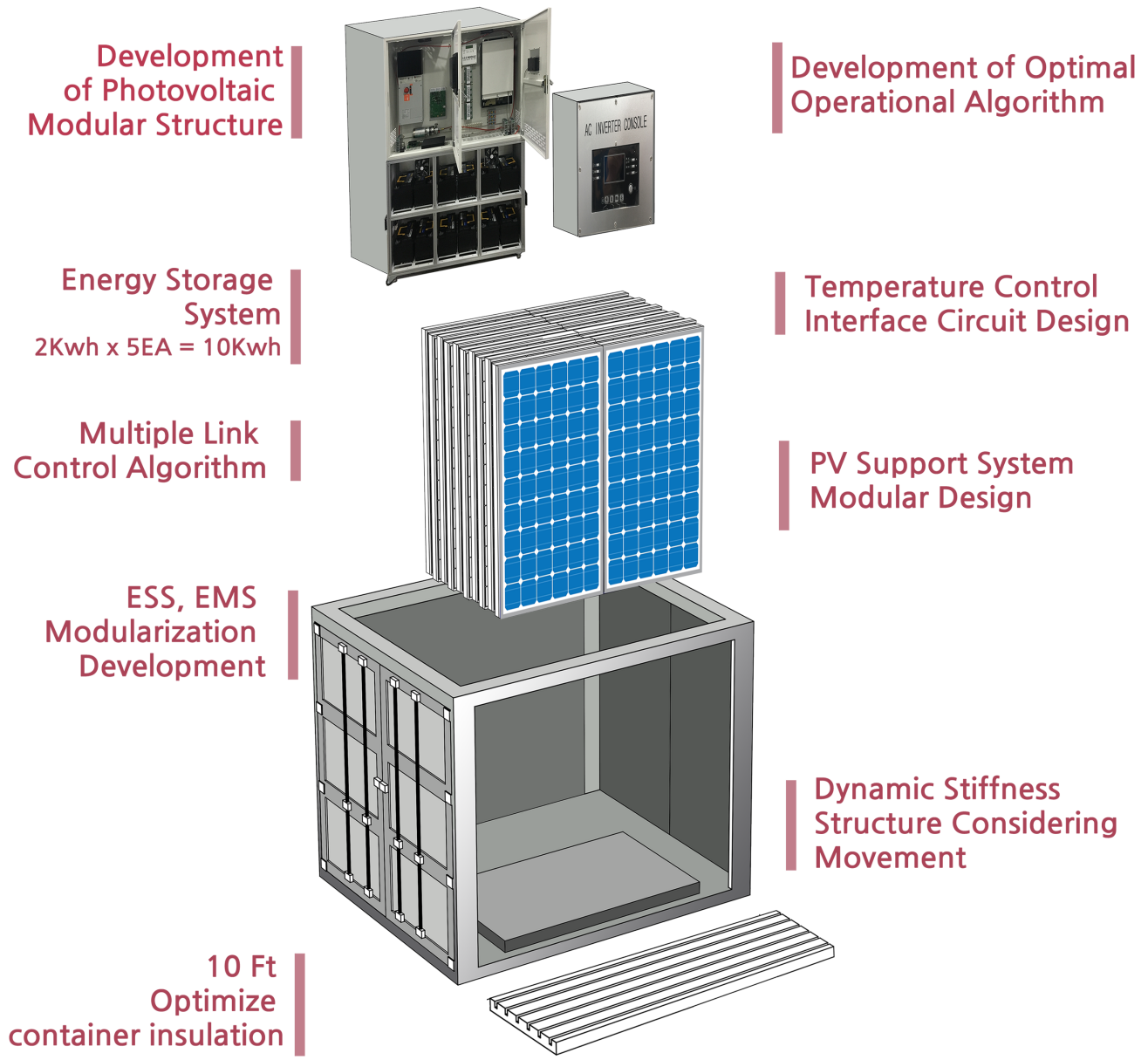
1. Offgrid Movable Power Generation System (10KWh)
2. Offgrid Movable Power Generation System (20KWh)
3. Solar standalone containerized smart farm

Movable Power Generation System using stand-alone photovoltaic power



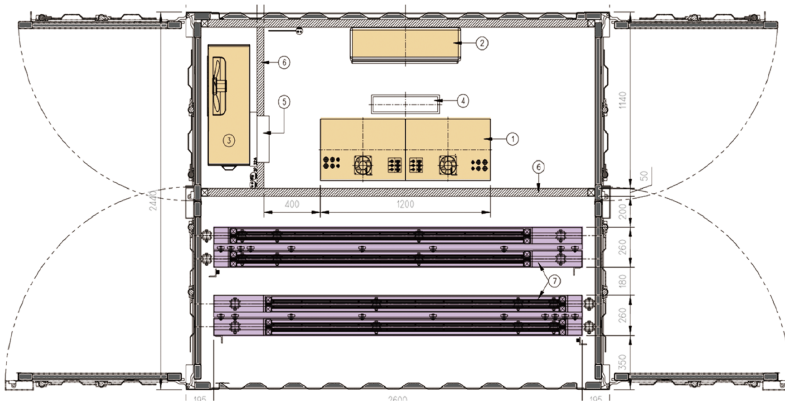
► Photovoltaic panels of 5kWh, ESS of 10-20kWh, System Operation and Multi-Connected Control System, Monitoring of system operations, Optimal layout design for efficient placement in approximately 10 ft container space

Product Deployment Diagram

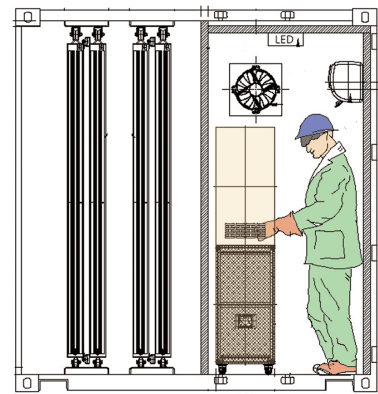


► Unify inverter, ESS, system operation and parallel control system, Easy installation, to stabilize system performance according to installation, Design and Fabrication of Integrated Power Management System

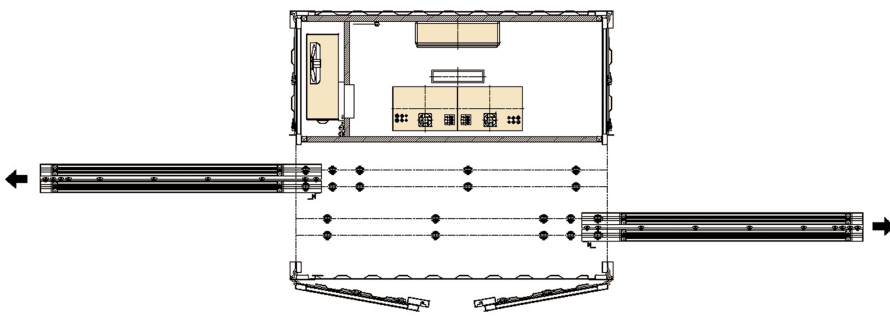
Product Inside



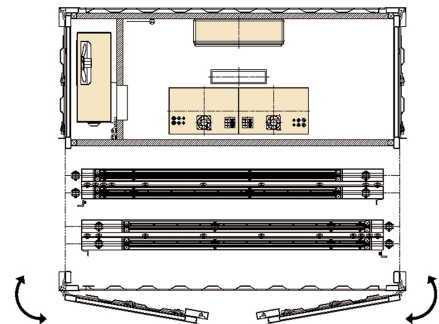
Floor plan



Elevation



2 Stage Open



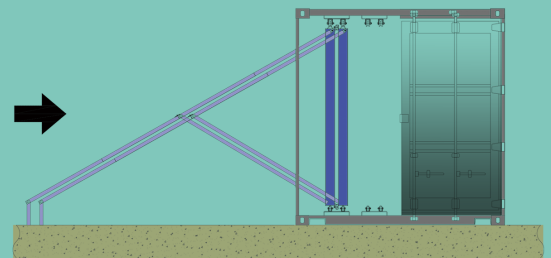
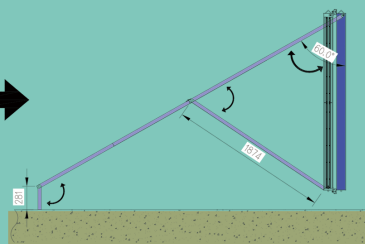
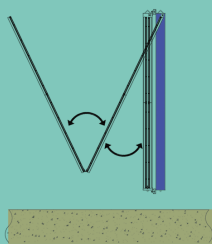
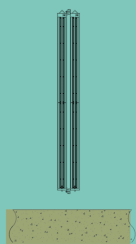
1 Stage Open

Structure Folding

Prepare to Spread Structure

Structure Extensions Status

Structure Complete Assembly



Spread Preparation

Spread Phase 1

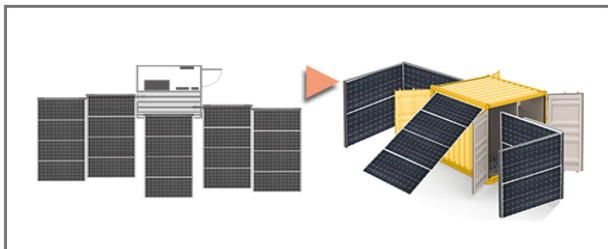
Spread Phase 2

Spread Phase 3

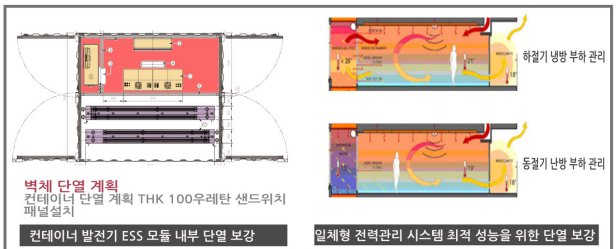
Product Overview



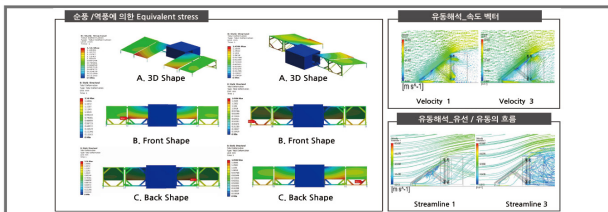
Core Technology Summary



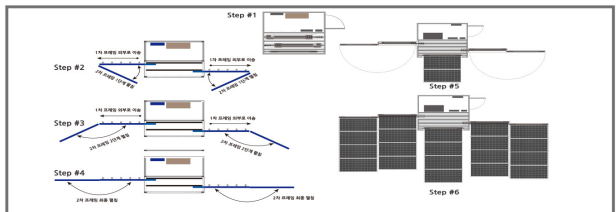
● Enhancement of solar panel support frame function



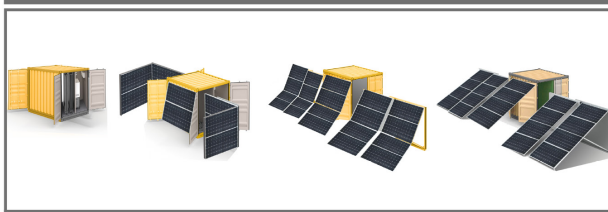
● Enhanced insulation performance in extreme cold areas



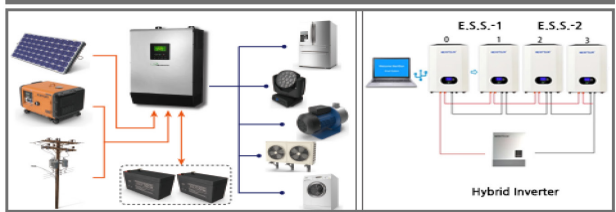
● Analysis of PV Support: Frame Structure (under any extreme env.)



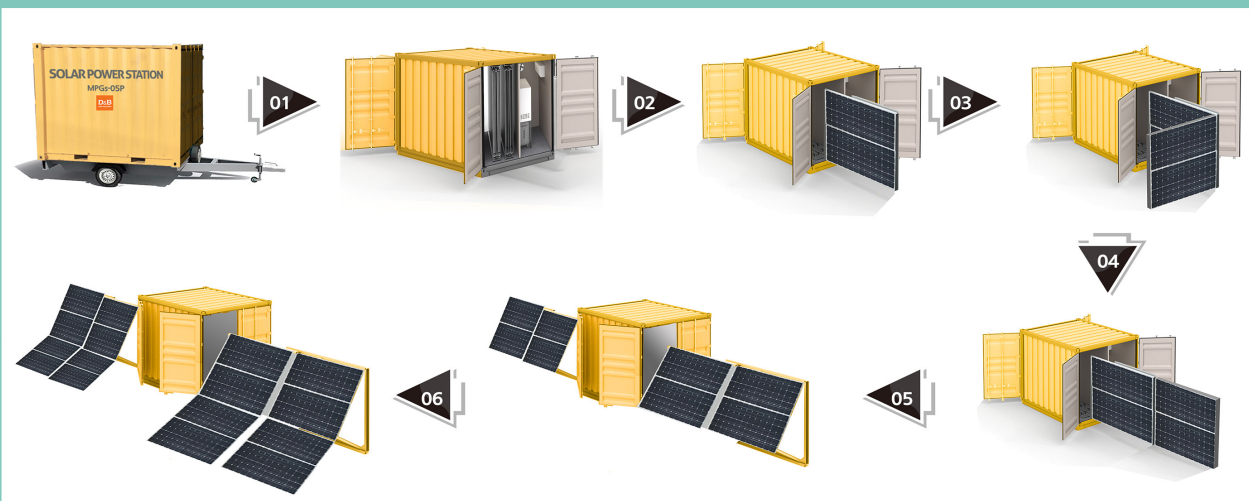
● Improve functionality for optimal power generation



● Enhanced product functionality makes it easier to move and install




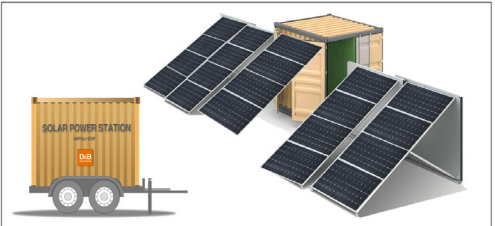
● Improved inverter and ESS functionality and complemented performance



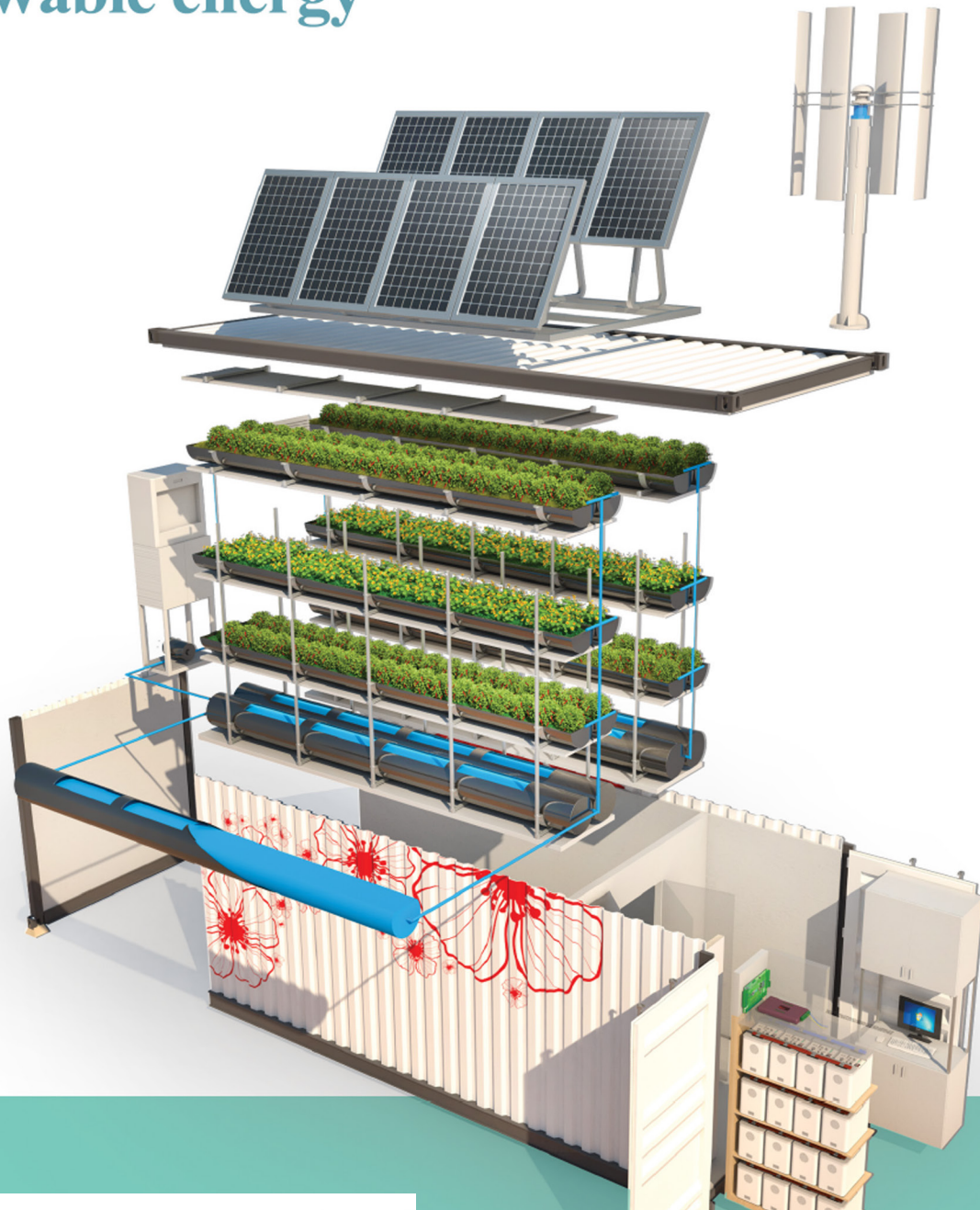
Product Photo



System Specification

Item	MPGs -05P	MPGs -10P
Image		
Solar Power	5~7kW	10~15kW
Size-movable & folded	2.4 x 3.0 x 2.4 Container	2.4 x 3.0 x 2.4 Container
Length - unfolded	11m	11m
Energy Storage	12kWh	24kWh
Inverter	5kW	10kW
Weight	≤ 2 ton	≤ 2.5 ton
Interface	12' Touch Screen	12' Touch Screen
Monitoring	Daily/Monthly statistics	Daily/Monthly statistics

Container-type Plant Factories using renewable energy

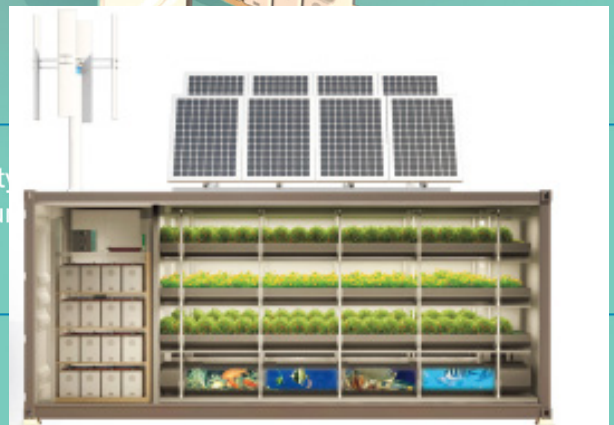


- 1 Water supply and drainage pipes
- 2 Battery case
- 3 Circulation pump
- 4 Hot and cold air conditioning
- 5 Aqua-phonic fishbowl
- 6 LED lighting
- 7 Cultivation shelf
- 8 Control equipment
- 9 CO2 Supply



▲ Automatic Control System consisting of various sensors

ertain facility
nutrient cultu



▲ Self Supply Energy Plant Cultivation System available for extreme environments

Product Photo



Container Type Smart Farm (6,000 mm × 2,400 mm × 2,400 mm)

Classification	Specification	Remarks
Cultivation Shelf	3 Steps (L3.0 x W0.6 x H2.0)	20Ft ISO Container
LED Lighting	70W(L2.8 x W0.5 x H0.15)	70W x 2EA
Circulating Tank	400 liters	20Ft ISO Container
Circulating Pump	2Ea (Inclusive)	Using DC pump
CO2 Supplies	Small Scale	-
Interior Lighting LED	20W x 2EA	-
Insulation Wall Reinforcement	100mm Urethane Insulation	Insulation Panel
Environmental Controllers	Includes intelligent controller	-
Air Conditioner	700W	Ventilation
Standalone Solar System	4.0 kW	-

Product Inside

01 Hydroponic System

3+1 specification
(L4800 x W730 x H2200)

02 Intelligent Battery Case
Independent Photovoltaic System

Electric capacity :4.0 kW

03 Various Circulation Pumps
Multiple (including parts)

Pump for DC

04 Air-Conditioning

Capacity: 700 W

Insulation reinforcement minimizes heating and cooling

05 Environmental Control Tank

500 litres capacity

06 LED Artificial Lighting

85 W (4800 x 700 x 15)

20W x 2Ea,

Electricity for use of equipment

07 Pumping Pipe System

EC/pH Measurement controller
Automatic supply/drain control

08 Environmental Controls

Monitoring for Controllers
Environmental Control System

09 Environmental System

CO2 Supply Controller
Lighting and tem. control

10 Intelligent Battery Controller

Solar+Wind Power Controller





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 E-mail. cooper1211@naver.com