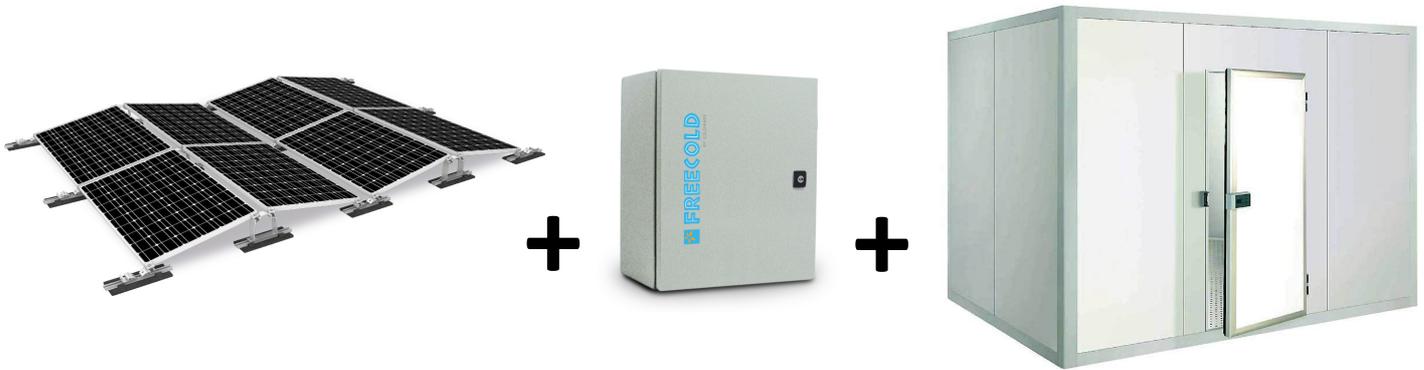


Solar-powered cold room - 10m³ to 25m³ *Including solar plant, battery storage and energy management*



Positive cold room

Featuring a modular design which fulfils the requirements of the various food industry sectors, the room's volume of 10 to over 25 m³ offers an ideal and adaptable solution for storing harvest produce and foodstuffs in optimum conditions.

100 mm reinforced insulation and an efficient opening system limiting heat entry significantly reduce heat loss.

From 200 kg to 800 kg of harvest produce can be cooled daily, using storage batteries that provide between 30 and over 60 hours of autonomy.

The monoblock refrigeration unit (from 2,200 W to 4,500 W) comes ready to install and simply slots into place via 2 notches at the top of the panel.

As an option, a tough, non-slip, easy-to-clean floor, a strip curtain and shelving for butchery, fishery and dairy applications.

Mounted in a few hours, FREECOLD solar cold rooms are complying with the strictest hygiene & safety rules.

Smart management of energy

Coupled to photovoltaic modules, the FREECOLD cabinet guarantees a high-quality power supply and prioritizes renewable energy before enabling a second potential source, grid or generator.

Solar batteries, with a capacity from 11 to 23 kWh, make it possible to smooth out peaks and troughs as well as intermittent energy from the photovoltaic power source.

The installation is secured by DC disconnect and lightning arrester devices, and a AC differential switch. The whole installation, including the photovoltaic field is grounded.

Solar plant

8 to 20 photovoltaic panels made in Europe come with their support to be ballasted and preinstalled wiring for easy and rapid commissioning.

The solar plant from 2.5 to 6 kW, powers directly the cold room and simultaneously recharges the battery to ensure the autonomy of the installation.

Solar cold room - 10 m³

2.5kW solar plant, battery storage and smart management of energy

- ✓ Positive cold room with 100 mm high-performance insulation
- ✓ Cooling capacity : 400 kg/day
- ✓ Minimum autonomy : 30 hours with 35°C outside temperature
- ✓ Interior dimensions : 2.40 x 2.00 x H 2.00 m
- ✓ High-performance insulation swing door 1.00 x 2.00 m with strip curtain
- ✓ Monoblock, straddle-mounted refrigeration unit 230V single-phase 50Hz
- Cooling power : 2.210W at +4°C - Maximum power demand : 1.750W
- ✓ As an option, a tough non-slip and easy-to-clean floor, shelving 120kg/rack, 4 levels, 2 m height, 6.5 m length
- ✓ 2.5 kW solar plant including 8 photovoltaic modules (310 Wp, 72 polycrystallin 6" cells, 25-years performance warranty)
- ✓ Supports of photovoltaic modules delivered in kit; 10° angle of inclination
- ✓ Electrical security box including DC/AC surge protectors; DC disconnecter and AC 30mA/16A differential switch
- ✓ Energy storage by sealed AGM solar batteries (maintenance-free) : 11,5 kWh (240Ah-48V); Pure lead technology ; Service life of 1800 cycles @ 30% DOD
- ✓ Energy management and power sources coupling optimized in relation with available power in entry (PV, batteries, AC input) and loads (refrigeration, recharge of batteries)
- ✓ Battery recharge possible by 2nd power source (grid or generator)



Solar cold room - 20 m³

2.5kW solar plant, 23kWh battery storage

- ✓ Positive cold room with 100 mm high-performance insulation
- ✓ Reference outside temperature : 35°C
- ✓ Cooling capacity : 800 kg/day
- ✓ Minimum autonomy : 60 hours
- ✓ Interior dimensions : 3.80 x 2.40 x H 2.00 m
- ✓ Swing door 1.00 x 2.00 m with strip curtain
- ✓ Monoblock, straddle-mounted refrigeration unit 400V - 50Hz
3-phases - Cooling power : 4.500W at +4°C - Maximum power demand : 2.850W
- ✓ As an option, a tough non-slip and easy-to-clean floor, shelving 120kg/rack, 4 levels, 2 m height, 9.7 m length
- ✓ 6 kW solar plant including 20 photovoltaic modules (310 Wp, 72 polycrystallin 6" cells, 25-years performance warranty)
- ✓ Energy storage by sealed AGM solar batteries (maintenance-free) 23kWh (240Ah-48V)
- ✓ Energy management and power sources coupling optimized in relation with available power in entry (PV, batteries, AC input) and loads (refrigeration, recharge of batteries)
- ✓ Battery recharge possible by 2nd power source (grid or generator)

