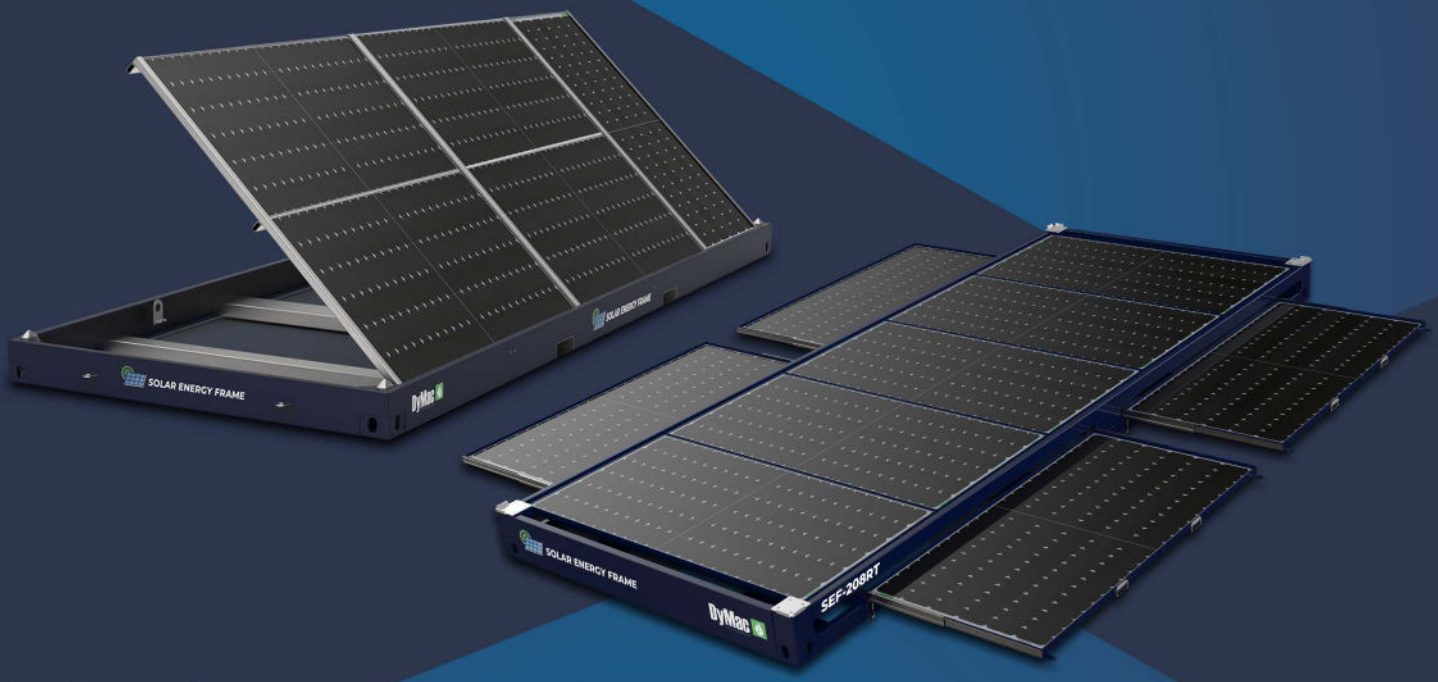
DyMac GLOBAL

SOLAR ENERGY FRAME



Solar Energy Frames:

- ✓ SEF-208
- ✓ SEF-208RT
- ✓ SEF-248
- ✓ SEF-248RT
- ✓ SEF-3210
- ✓ SEF-3210RT

Harvesting Clean Energy / Protecting Our Environment

SOLAR ENERGY FRAME



Innovative plug ‘n’play solar energy frame delivering renewable power for lighting, heating and onboard sockets inside ISO office containers

✓ **Reduce fuel cost**
✓ **Reduce harmful emissions**
✕ **No Complicated electrical installation**

The DyMac Solar Energy Frame is roof mountable and can be manufactured to suit 20ft , 24ft or 32ft ISO container sizes. Appropriately sized units can be used in conjunction with our Condor Energy Pod 301 or 401 power units, providing power to multiple accommodation modules on site.

By using this method each office container can make every 20ft , 24ft or 32ft roof a renewable energy source. Each Solar Energy Frame is able to produce up to 5kW of power. The frame is simple to set up and requires no installation. The frames can come complete with two cables, one to be plugged directly into an office unit and the other straight into a Condor Energy Pod and or other power source such as a Lynx Power Bank unit.

The Solar Energy Frame with the solar panels located inside can be angled for optimum input and can be controlled by hydraulic actuators with a simple push button operation. The panels can be set at different angles to capture the maximum solar energy year round:

Spring = half way
Summer = max up
Autumn = half way
Winter = flat down

Once solar power has been generated through the Solar Energy Frame, the energy will be used to power any heating, lighting or plug sockets inside the units and any left-over power will be sent to the Condor Energy Pod to be stored in the battery bank and strategically distributed on site to the office container units connected within the captivative renewable energy system.



Plug & Play Modular Power Extendable



Intelligent Efficient Power Management



Battery Energy Storage System

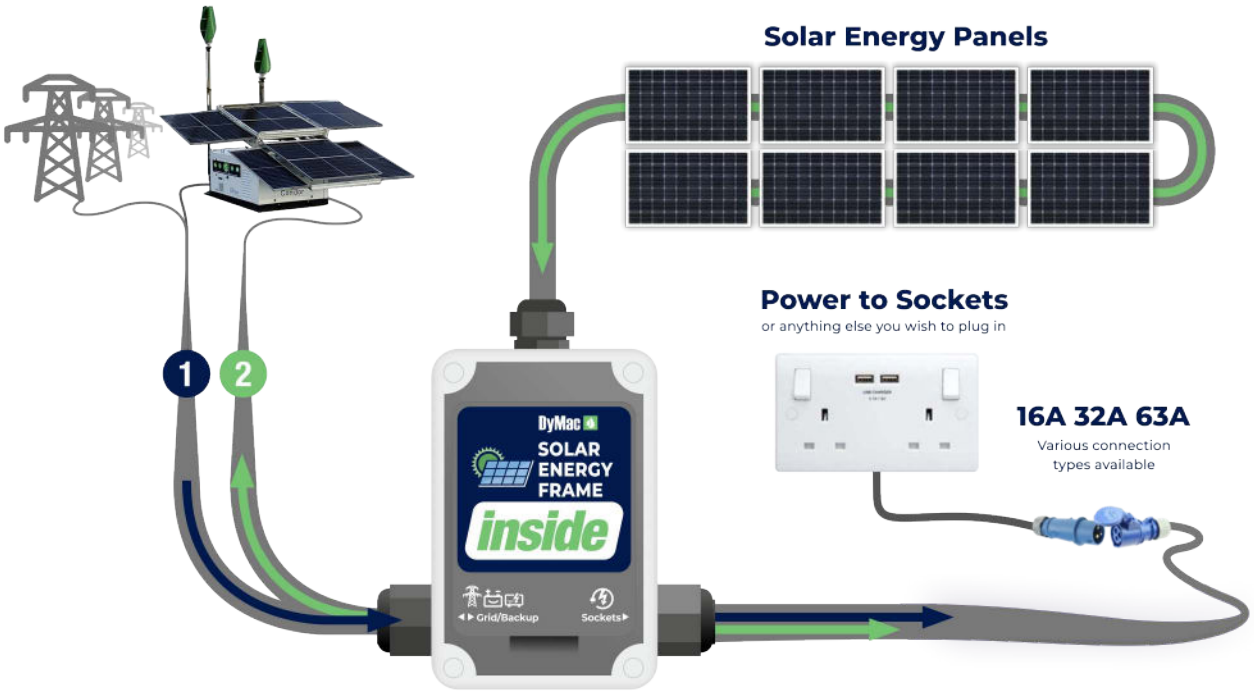


Connect to Local Power



Generator back up HVO

External Grid Power or Condor Energy Pod 401 or other Renewable Power Storage Sources



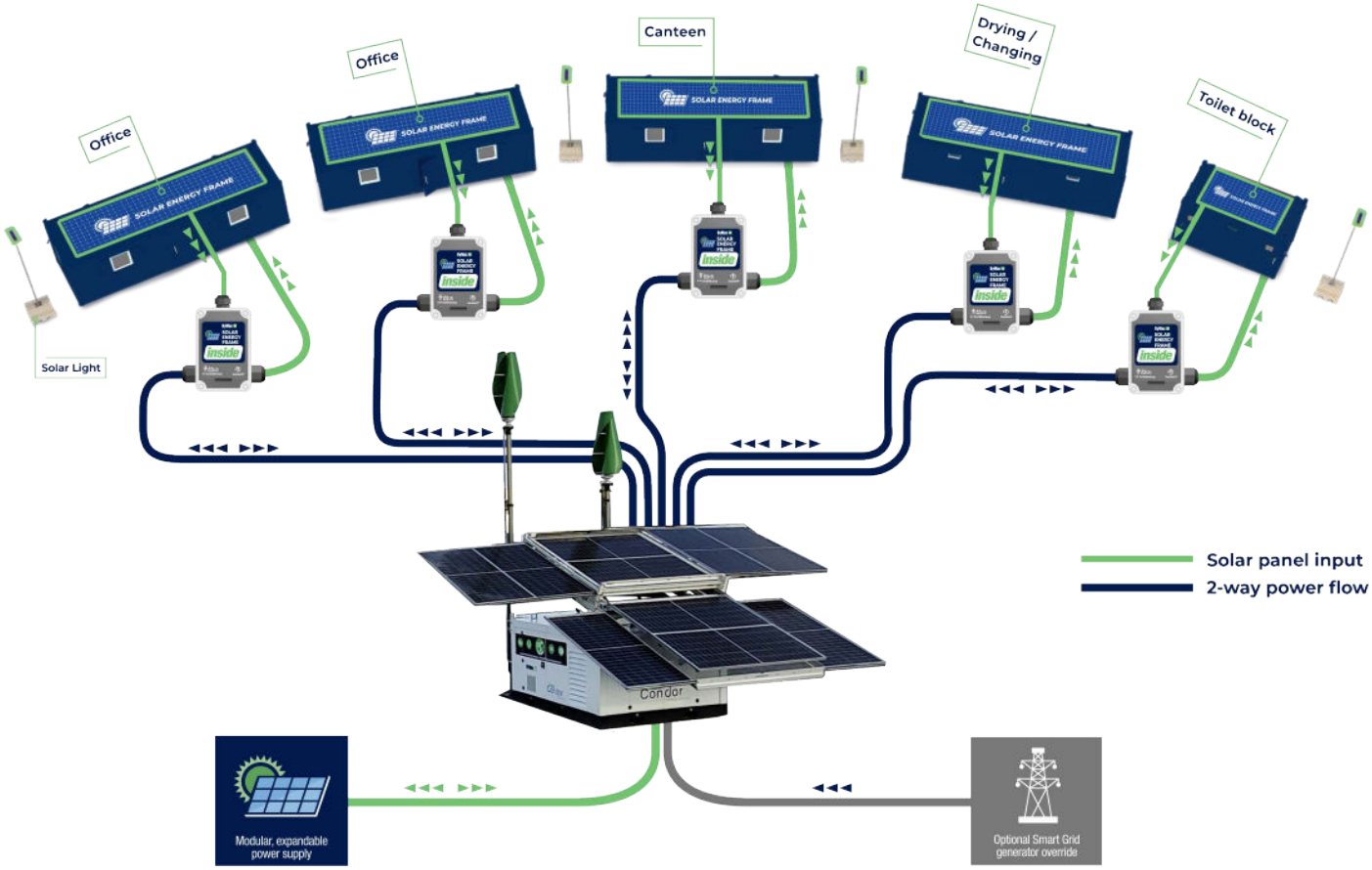
1 High Demand

Incoming solar & other power combines to meet demand.

2 Power Harvesting

Low demand & high solar input.
Spare solar power diverted to battery storage.

Captive Renewable Energy System



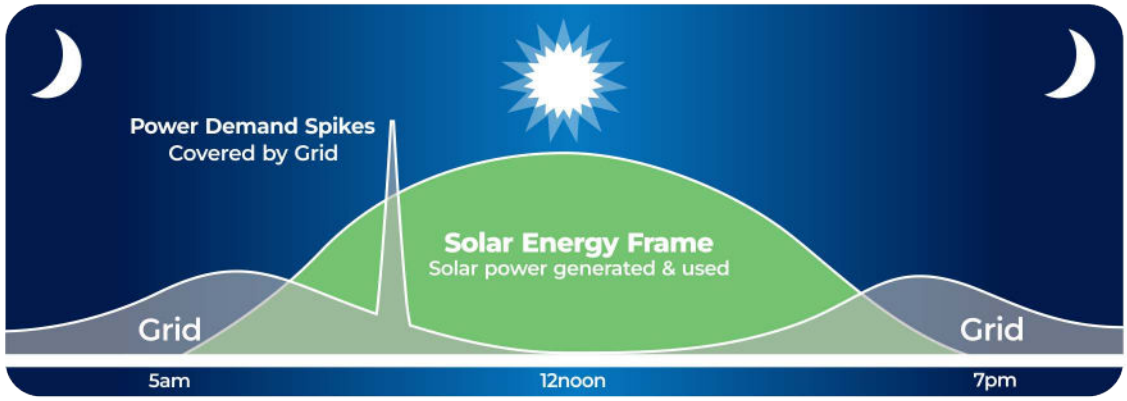
Power Charging Scenarios

Simple examples of how energy flows over 24 hours

For illustration purposes only

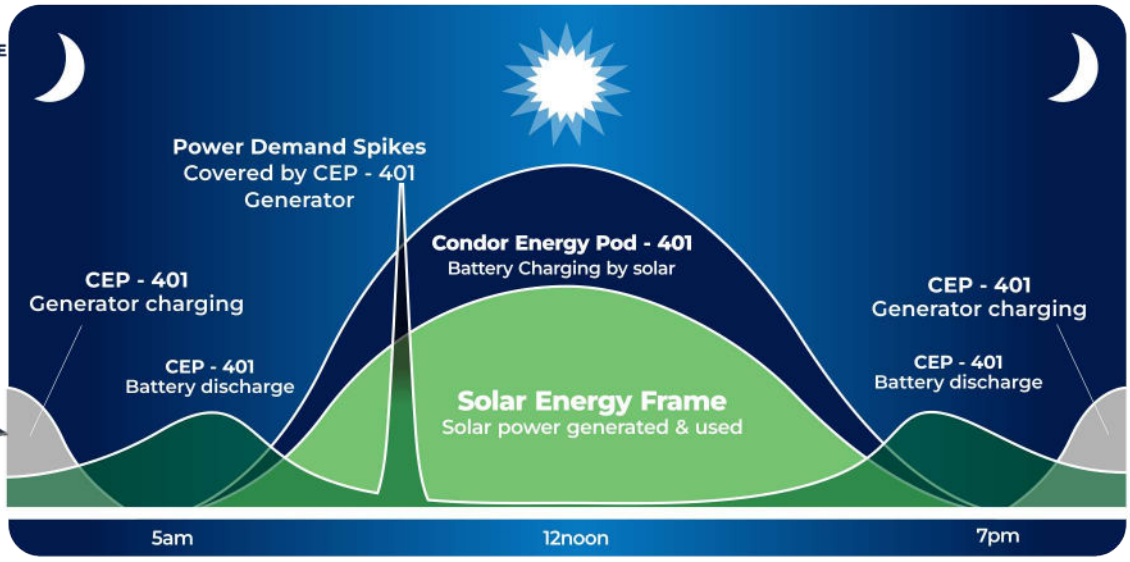
SOLAR ENERGY FRAME
+ CEP -401





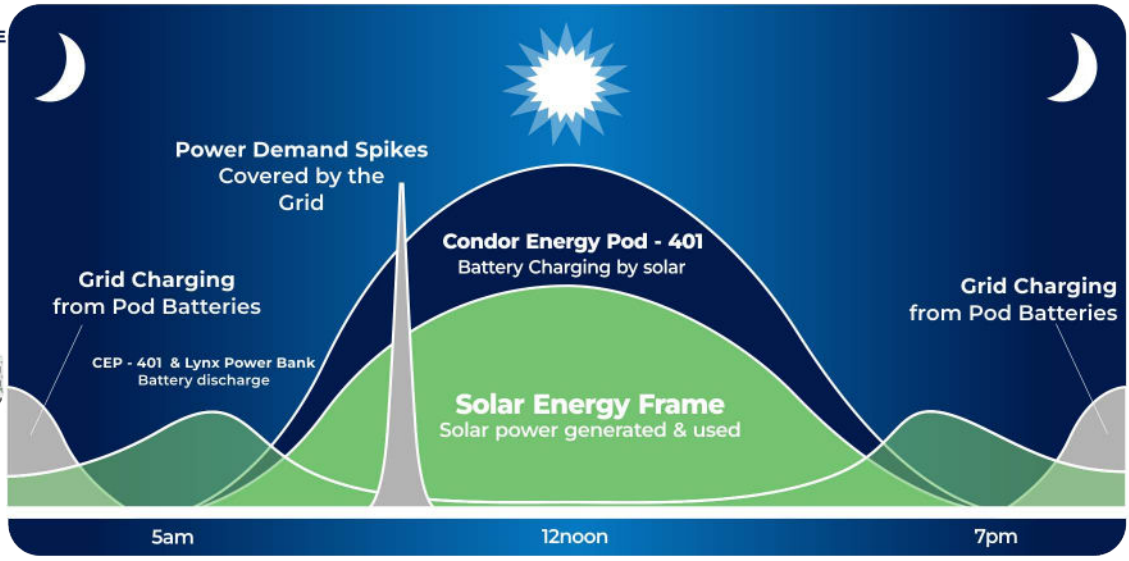
SOLAR ENERGY FRAME
+
CEP -401





SOLAR ENERGY FRAME
+ CEP -401
+ Lynx Power Bank
+ Grid





SOLAR ENERGY FRAME 20 Fixed Flat Manual Hydraulic 24 Fixed Flat Manual Hydraulic 32 Fixed Flat Hydraulic

		Solar Energy Frame 208	Solar Energy Frame 248	Solar Energy Frame 3210
POWER PRODUCTION	Max. Continuous Output Power (W)	3000	3600	4800
	Nominal Output Voltage (V)	220 / 230 / 240		
	Nominal Frequency (Hz)	50 / 60		
	Power Factor	> 0.99		
	Output Current Harmonic Distortion	< 3%		
	Solar Module	CE, TUV, UL, CEC, JET, IEC 61215, IEC 61730, UL 1703		
	Micro Inverter	CE-LVD, CE-EMC, VDE 4105, VDE 0126, EN 50549		
	Environmental Protection Rating	IP67		
	Operation Ambient Temperature Range	-20 °C to 60 °C		
	Relative Humidity	0-100%		
	Max. Operating Altitude without de-rating (m)	2000		
POWER CONNECTION	Connections (Other options available)	32amp	32amp	32amp
	Nominal Output Voltage (V)	220 / 230 / 240		
	Nominal Frequency (Hz)	50 / 60		
	Environmental Protection Rating	IP67		
CONTROL	Energy meter	An energy meter is within the control panel to monitor the solar energy created. DataBox remote data telemetry available as an upgrade.		
MECHANICAL	Weight (Kg)	960 kg	1230 kg	1782 kg
	Dimensions (WxHxD mm)	Fits 20' x 8' Static cabin / 6058 x 2438 x 306	Fits 24' x 8' Static cabin / 7318 x 2438 x 306	Fits 32' x 10' Static cabin / 9754 x 3048 x 306
	Storage	Can be stored in stacks		
	Connection / Mount	ISO corner connection / Jack leg fixing points (Optional)		
	Finish	Paint RAL 5011		
	Transport	Centre Fork-lift pockets / Corner lifting & bracing points		







Other Renewable Products



Lynx



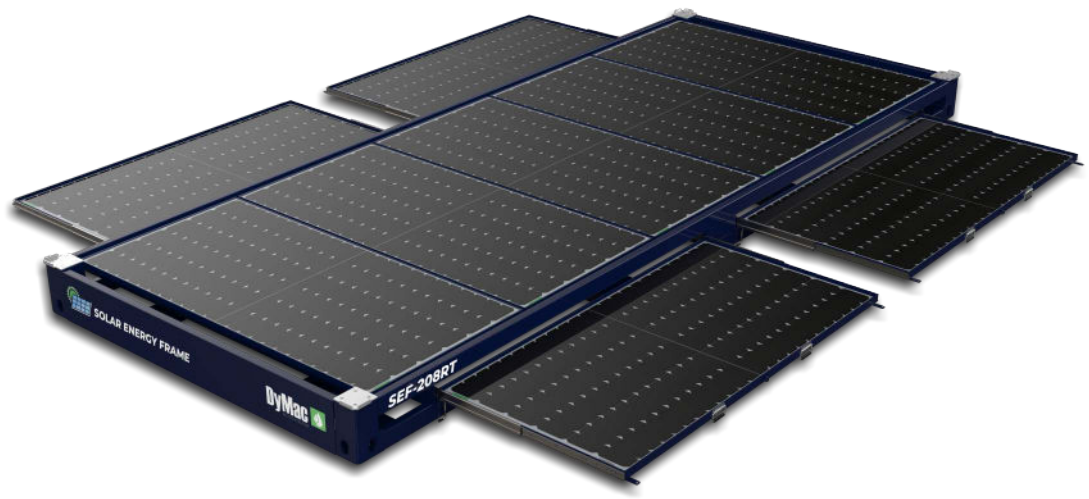
Falcon



Condor

SOLAR ENERGY FRAME 20 Fixed Flat Manual Hydraulic 24 Fixed Flat Manual Hydraulic 32 Fixed Flat Hydraulic

		Solar Energy Frame 208RT	Solar Energy Frame 248RT	Solar Energy Frame 3210RT
POWER PRODUCTION	Max. Continuous Output Power (W)	5400	6000	8400
	Nominal Output Voltage (V)	207-240		
	Nominal Frequency (Hz)	50 / 60		
	Power Factor	> 0.99		
	Output Current Harmonic Distortion	< 3%		
	Solar Module	CE, TUV, UL, CEC, JET, IEC 61215, IEC 61730, UL 1703		
	Micro Inverter	CE-LVD, CE-EMC, VDE 4105, VDE 0126, EN 50549		
	Environmental Protection Rating	IP67		
	Operation Ambient Temperature Range	-20 ˚C to 60 ˚C		
	Relative Humidity	0-100%		
	Max. Operating Altitude without de-rating (m)	2000		
POWER CONNECTION	Connections (Other options available)	32amp	32amp	32amp
	Nominal Output Voltage (V)	207-240		
	Nominal Frequency (Hz)	50 / 60		
	Environmental Protection Rating	IP67		
CONTROL	Energy meter	An energy meter is within the control panel to monitor the solar energy created. DataBox remote data telemetry available as an upgrade.		
MECHANICAL	Weight (Kg)	1175 kg	1430 kg	2100 kg
	Dimensions (WxHxD mm)	Fits 20' x 8' Static cabin / 6058 x 2438 x 306	Fits 24' x 8' Static cabin / 7318 x 2438 x 306	Fits 32' x 10' Static cabin / 9754 x 3048 x 306
	Storage	Can be stored in stacks		
	Connection / Mount	ISO corner connection / Jack leg fixing points (Optional)		
	Finish	Paint RAL 5011		
	Transport	Centre Fork-lift pockets / Corner lifting & bracing points		





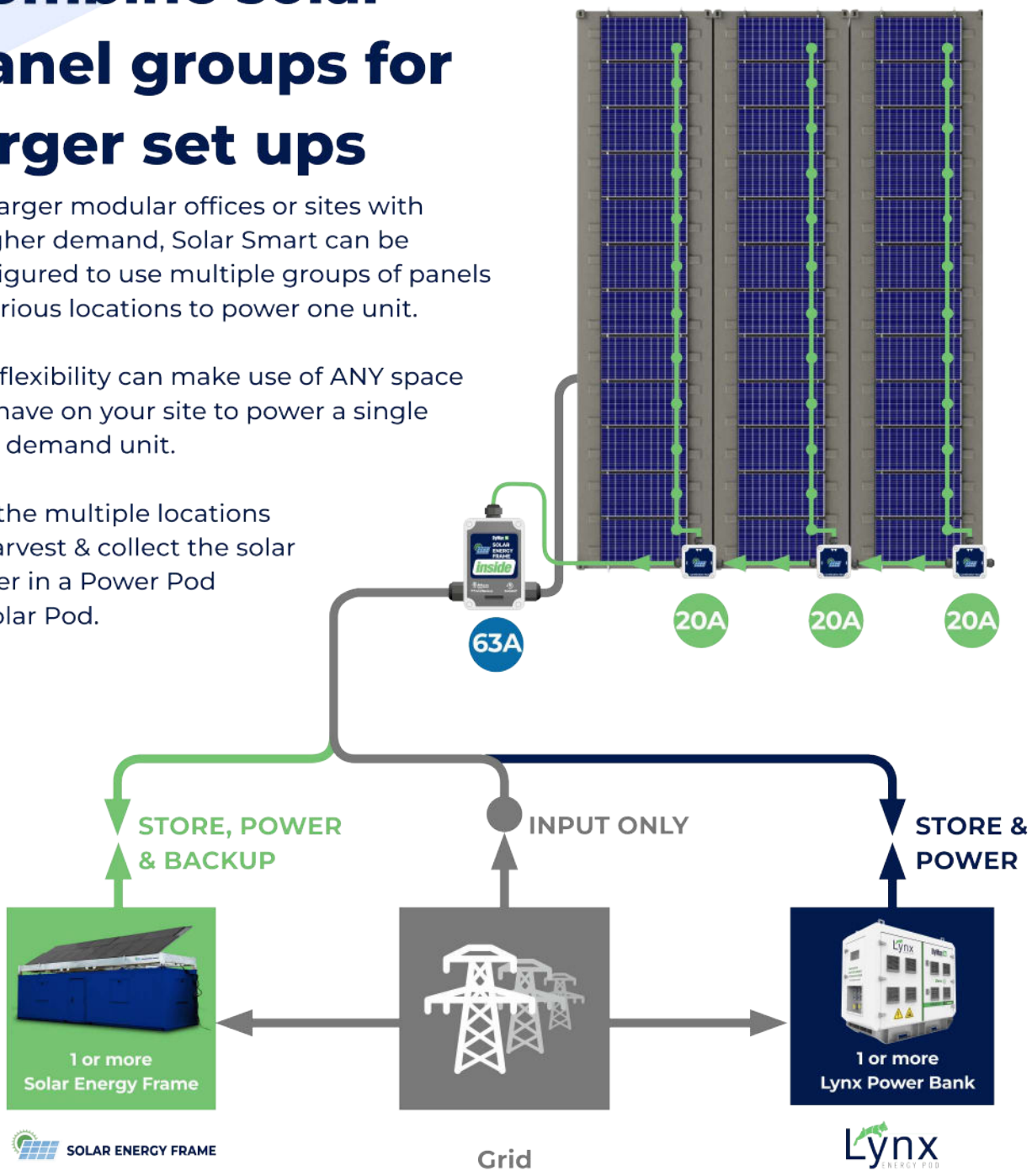
Up to 125Amps per Solar Smart Box with the help of the Combination Box.

Combine solar panel groups for larger set ups

For larger modular offices or sites with a higher demand, Solar Smart can be configured to use multiple groups of panels in various locations to power one unit.

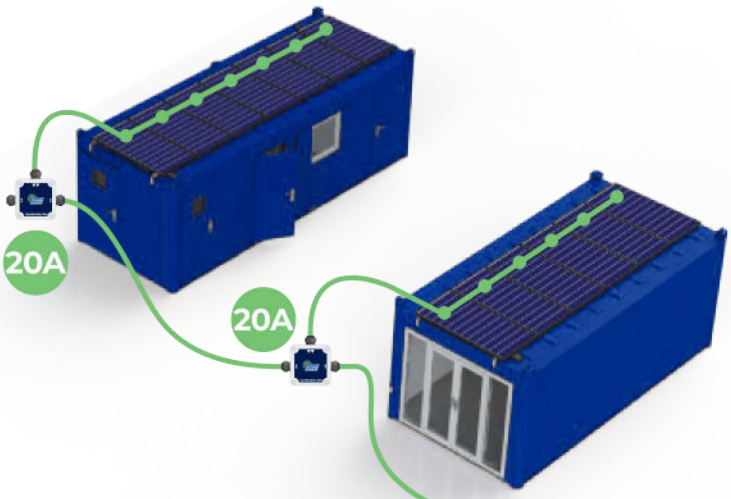
This flexibility can make use of ANY space you have on your site to power a single high demand unit.

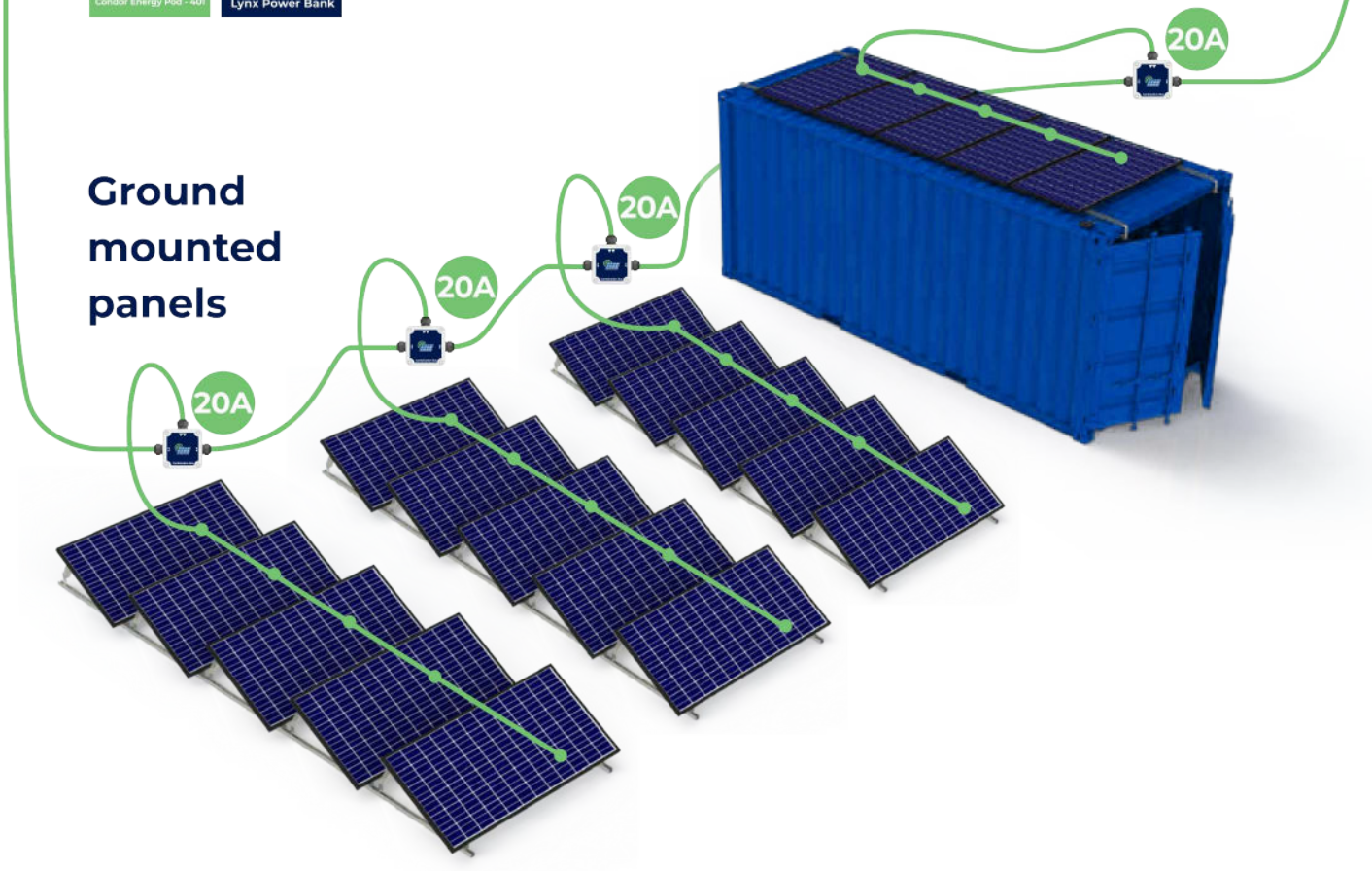
Use the multiple locations to harvest & collect the solar power in a Power Pod or Solar Pod.



Multiple solar groups for 1 unit

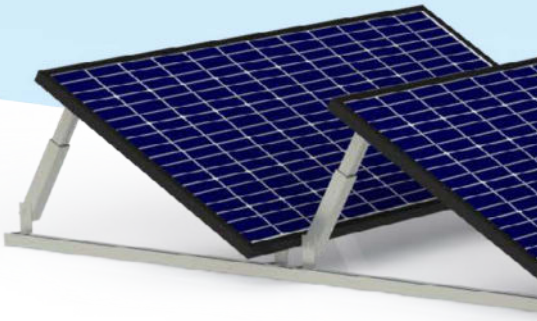






Ground mounted panels

Modular Parts



Solar Energy Frame Box



- 16A **SSB-1P-16A** 6x panels / 16A max
- 32A **SSB-1P-32A** 15x panels / 32A max
- 63A **SSB-1P-63A** 30x panels / 63A max
- 125A **SSB-1P-125A** 50x panels / 63A max

Supplied with or without plugs



- 16A **SSB-3P-16A** 6x panels / 16A max
- 32A **SSB-3P-32A** 15x panels / 32A max
- 63A **SSB-3P-63A** 30x panels / 63A max
- 125A **SSB-3P-125A** 50x panels / 63A max

Supplied with or without plugs

Solar Energy Frame Panels



SSP 300W

1650 x 992 mm
Max units per 20A branch: 14



SSP 350W

1650 x 992 mm
Max units per 20A branch: 12



SSP 400W

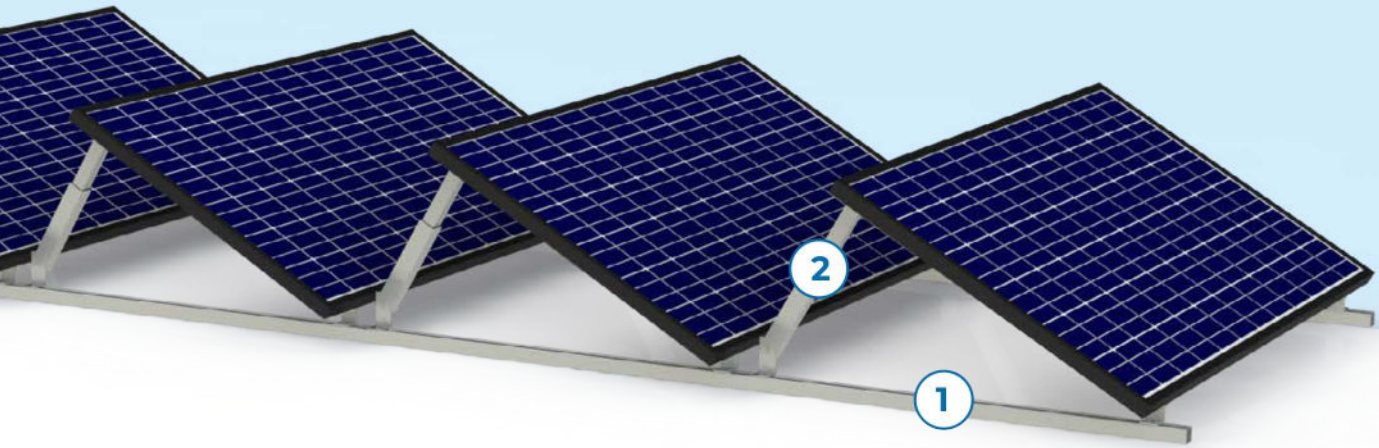
1960 x 992 mm
Max units per 20A branch: 12

Combination Box

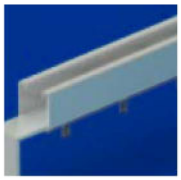
20A 12x panels max
20A max input



- 16A **SSCB-16A** For a 16A throughput
- 32A **SSCB-32A** For a 32A Throughput
- 63A **SSCB-63A** For a 63A Throughput
- 125A **SSCB-125A** For a 125A Throughput



Mount Rails



1

SSR L3000

Length 3m
Single Unit (2x required for each branch)

SSR L6000

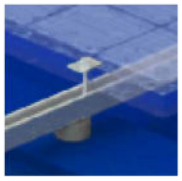
Length 6m
Single Unit (2x required for each branch)

2

SSR Tilt Frame

Adjustable tilt angle mount.
For 1x panel

Fastenings



SSF Bolt Clamp

Connect panels to the Mount Rails.
Single Unit (4x required for each panel)



SSF Unit Clamp

Connect Mount Rails to cabin or building
Single Unit (2x required for each Mount Rail)

Cables

SSC Solar-to-solar

Connect panels together
Various lengths available.

SSC Box-to-Solar

Connect a solar panel group to the Solar Box or Combination Box
Various lengths available.

16A **SSCB-16A**
For a 16A throughput

32A **SSCB-32A**
For a 32A Throughput

63A **SSCB-63A**
For a 63A Throughput

125A **SSCB-125A**
For a 125A Throughput

Non invasive modular fixings

The frame is designed so that no drilling or direct fixing is needed. The frame is mounted in-place like a car roof-rack only using friction mounting points.

Further secure points are also integrated for bungees and ratchet straps hold everything in place.

Solar Smart boxes have a strong magnet fixing so they can be mounted directly to the outside of the cabin.

Optional permanent integration

We can supply all Solar Smart parts set up with the intention to hard-wire the system and framework into cabins and buildings.

The Solar Smart Box can be wired into the cabin circuit and mounted permanently inside as part of the cabin/building manufacturing process.



DyMac GLOBAL

Harvesting Clean Energy / Protecting Our Environment

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