

**WECO**



# SUN-ALL

UNIVERSAL RETROFIT BALCONY ESS

Retrofit Energy Storage System for Existing Micro Inverters with  
Smart Heating System for Outdoor Applications



# SUN-ALL - Retrofit

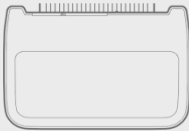
MPPT + ESS Retrofit Ready



Automatic Heating System



Built-in Fire Fighting System



243 mm  
(11.4 in)



280 mm  
(11.0 in)

590 mm  
(17.7 in)

360mm  
(14.17in)

## Specifications

	System	Module Ax (MPPT + Battery)	
DC OUTPUT	<b>Module Ax Integrated Output Data</b>		
	Voltage Range	30 ~ 43.2 Vdc	
	Power	400 W per Channel (2 Channels)	
	Voltage Range (PV Bypass)	12 ~ 60 V	
	Max. Output Current	12.5 A *2	
PV INPUT	<b>Module Ax Integrated MPPT Datasheet</b>		
	Max. PV Input Power	600 W * 2 Channels	
	Max. PV Input Current	15 A *2	
	PV Short Circuit Current	18 A *2	
	Nominal PV Input	40 Vdc	
	MPPT Voltage Range	20 ~ 60 Vdc	
	MPPT Number	2	
BATTERY DATA	<b>Battery Technical Specification – Battery Module Ax / Module Bx</b>		
	Cell Type	LiFePO4	
	Battery Nominal Voltage	38.4 Vdc	
	Battery Capacity	50 Ah	
	Battery Energy	1920 Wh	
	Max. Charging/Discharging Current	40 A	
	Battery Operating Voltage	32.4 Vdc - 43.2 Vdc	
	Battery Storage Temperature	-20 °C +65 °C	
	BMS Operating Temperature	-20 °C +50 °C (Auto Heating Function)	
	Heating Function	WeCo Smart Heating Control	
	Reverse Polarity Protection	YES	
	BMS Protections	OVP,UVP,OCP,SCP,OTP,UTP	
	Capacity Expansion	YES	
	Memory Log Events	200	
	HMI Interface	LED + Key Button	
	Dimensions (W x D x H) (mm)	400 x 290 x 450	
	Relative Humidity	10-85%	
	STANDARDS	Safety & EMC Standard	IEC62109, UN38.3,IEC/EN 62109-1,IEC/EN 62109-2,IEC61000-6-1,IEC61000-6-2,IEC61000-6-3,IEC61000-6-4
		Safety and Shipping	UN38.3,IEC62619
Cooling Method		Natural	

Ax



**Integrated MPPT 1.2 kW  
with Battery 1.9 kWh**

Bx



**Expansion Battery  
Module 1.9 kWh**

The above-mentioned temperatures are limited to the BMS ranges, such values may not be covered by the performance warranty. We recommend contacting WeCo for the most up-to-date datasheet, read warranty and manual before making any purchasing decisions. No part of this document can be copied or reproduced without WeCo written permission. All data is subject to change without prior notice.

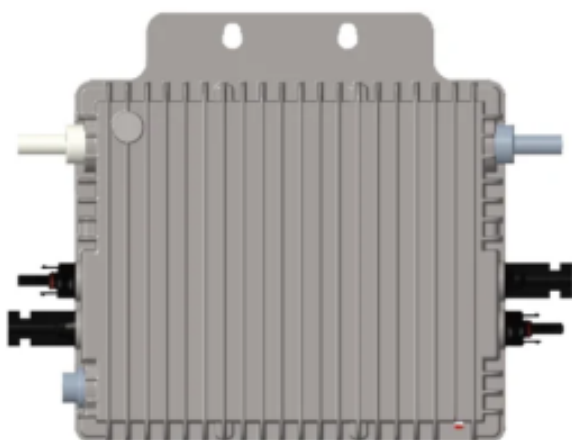
# SUN-ALL - Retrofit

## MICRO INVERTER

works with any pre-existing Micro Inverter

### Specifications

Nominal Input/Output Power	800 W / 800 W
Conversion Efficiency	95.4%
AC Input/Output Frequency and Voltage	50 Hz (45Hz-55Hz),L/N/PE,220Vac/230Vac
Grid Type	Single Phase L1 + N
Rated Grid Input/Output Current	4 A
Max. Grid Input/Output Current	4.5 A
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Power Factor	1
Ingress Protection	IP65
THD	Non-Linear Load THD < 3% and Linear Load THD < 1.5%
EMC & Safety	CE IEC61400 EMC
Grid Certifications	VDE



# SUN-ALL

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BUILT-IN MPPT CHARGER



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## FEATURES



### BUILT-IN SAFETY

LFP batteries and firefighting system to ensure the highest safety standards.



### ENHANCED PERFORMANCE IN COLD WEATHER

Smart heating system function ensuring consistent energy production even in low temperatures, thereby maximizing output and efficiency.



### OPTIMIZED ENERGY CONVERSION

The retrofit optimizes micro inverter performance by maintaining an ideal operating temperature, resulting in improved energy conversion efficiency and increased overall system output.



### QUICK INSTALLATION

Modular stackable design adaptive plug & play self-configuration.

# WECO

WeCo Srl a Socio Unico  
Viale J. F. Kennedy 113-121  
50038 Scarperia e San Piero  
Firenze, Italy

weco@wecobatteries.com  
www.wecobatteries.com

