



## MESS: Micro Energy Storage System

### Introduction

Transform how you harness and utilize solar energy with our cutting-edge Micro Energy Storage System (MESS), designed for both ground and balcony installations. Perfectly suited for the European energy landscape, MESS offers unparalleled flexibility and efficiency in managing your renewable energy sources.

### Features:

**Versatile Solar Panel Compatibility** Our system is compatible with an array of solar panels, catering to diverse architectural styles and applications. Whether you prefer the aesthetic integration of flexible panels or the durable efficiency of rigid panels, MESS adapts to your needs.

**Easily Upgradable Stackable Battery** MESS features a modular battery system, allowing for effortless upgrades as your energy requirements evolve. This scalable approach ensures your energy storage capacity grows with you, providing peace of mind and future-proofing your investment.

**Seamless Integration with PVHUB** Designed to enhance existing solar installations, MESS works harmoniously with your current solar balcony setup via an independent PVHUB. This feature guarantees an easy integration process, optimizing your space without compromising on performance.

**Adaptive Charging Modes for Optimal Efficiency** Take control of your energy usage with customizable charging modes. Prioritize energy consumption from the grid or battery based on your preferences, ensuring efficient use of resources and potential savings on energy bills.

**Monitor and Manage with Ease** Stay connected to your MESS system with our intuitive mobile application. Monitor your energy production and consumption in real-time, make adjustments remotely, and enjoy streamlined management at your fingertips.

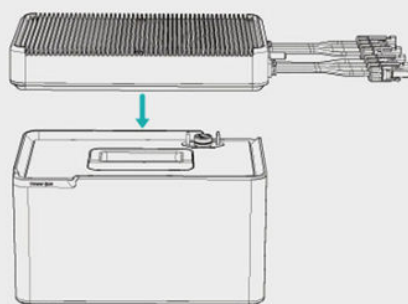
## Specifications

### PVHUB

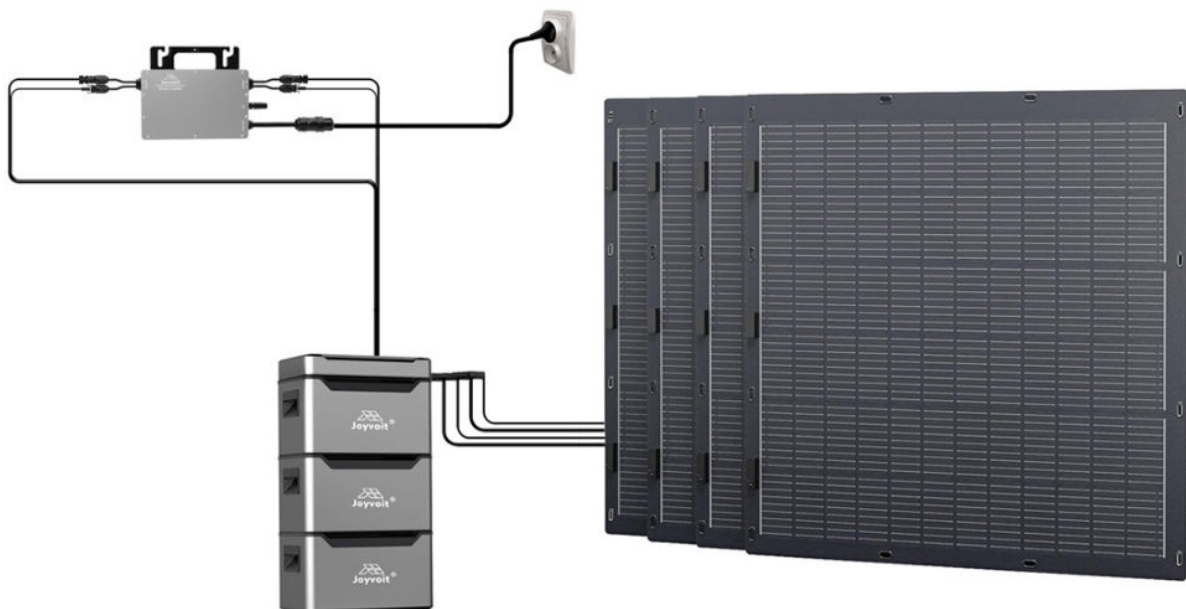
Recommended.PV Module	300W-580W* 2
MPPT Voltage Range	18V-60V
Startup Voltage	18V
Max.Input Voltage	60V
Input Voltage PV1	18V-60V
Input Voltage PV2	18V-60V
Max. Continuous DC Output Power	800W* 2
Max. Continuous Output Current	23A
Output Voltage DC1	18-55V
Output Current DC1	23A Max
Output Voltage DC2	18-55V
Output Current DC2	23A Max
Max. Efficiency	96%
Dimension(W*D*H)	320*200*55mm
Communications	Wi-Fi/ Bluetooth
Protection Grade	IP65
Warranty	10 Years
Weight	4.7Kg

### Battery Pack

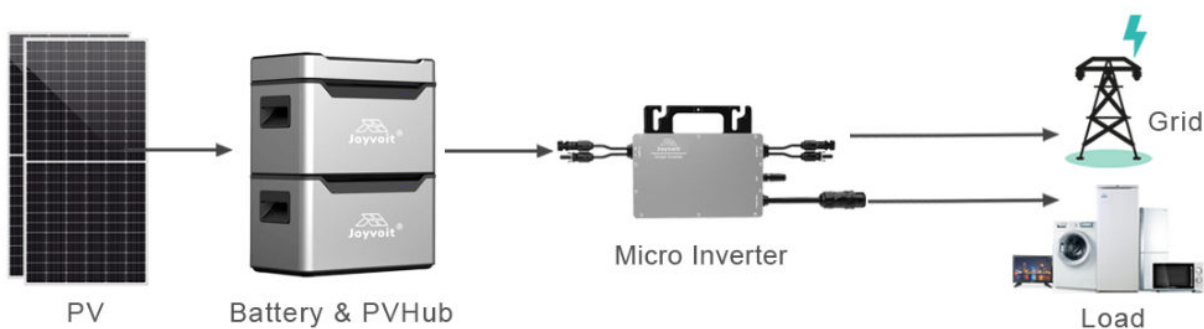
Nominal Capacity	1024Wh
Nominal Voltage	51.2V
Working Voltage Range	40 -58.4V
Battery Type	LiFePO4
Dimension(W*D*H)	320*200*196mm
Weight	9.3kg
Compatible	4
Operating Ambient Temperature Range	-20°~65°C
Protection Grade	IP65
Cooling	Nature Cooling
Warranty	10 Years
Number of cycles	6000
Protocol type	CAN/RS-485



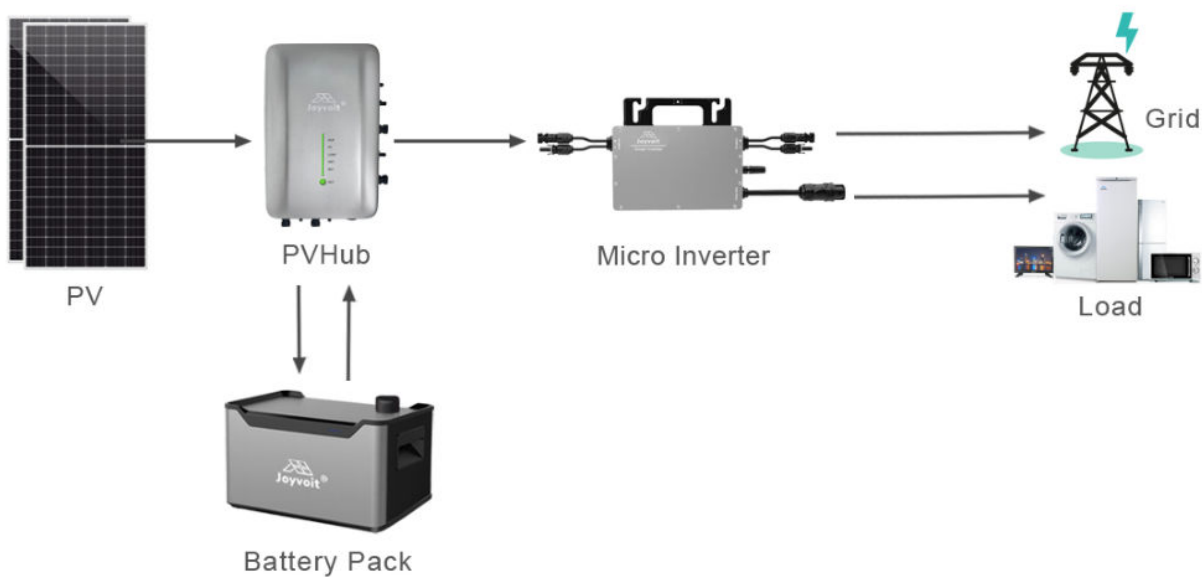
# Application Diagram

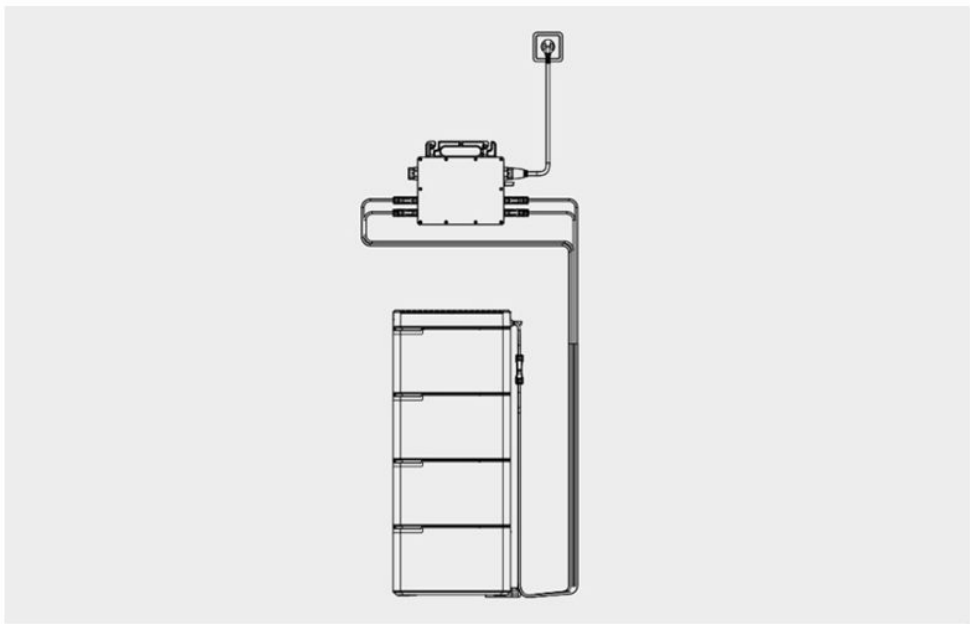


## UniSolar MESS All-Inclusive System

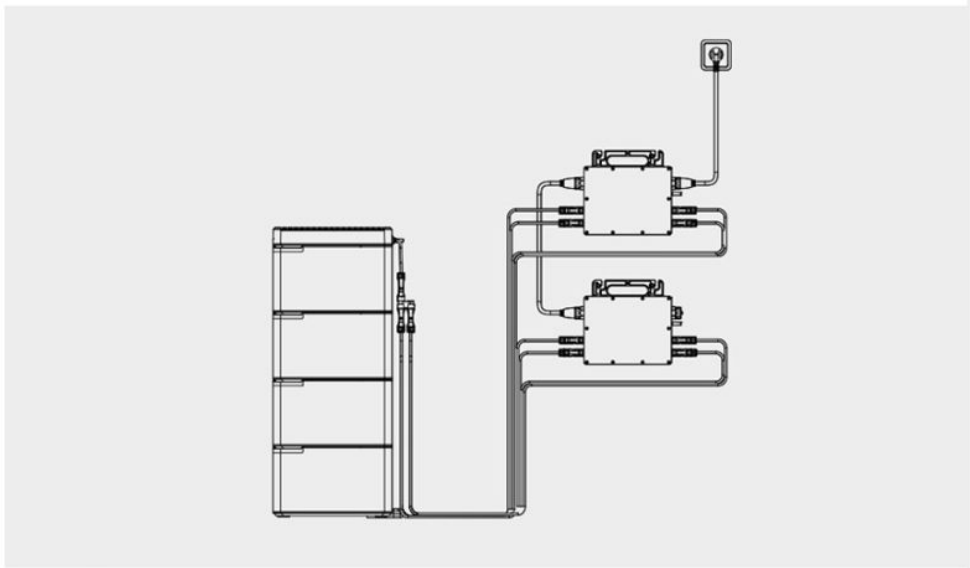


## SolarFlex MESS with Independent PVHub





PVHUB is stacked on the battery pack and connected to 1 micro-inverter



PVHUB is stacked on the battery pack and connected to 2 micro-inverters

## Wireless Bluetooth Monitoring

You can check the system status through the mobile APP at any time.

