

Product Information

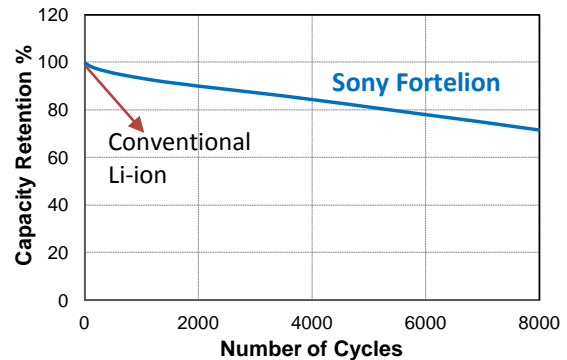
Fortelion™
Energy Storage Module and System
with Sony's Olivine-type Lithium Iron Phosphate Cell



Main Features of the Energy Storage Module

1. Long Lifespan with Deep Cycles

Rechargeable olivine-type lithium-ion iron phosphate batteries will have a long useful life of 20 years when charged/discharged once daily at room temperature (23°C), thanks to their inherently superior properties. Furthermore, Sony has achieved a long-lasting charge/discharge cycle that does not depend on DOD (Depth Of Discharge)



2. High Performance Safety

The contained iron phosphate cells, which boast excellent thermal stability and storage characteristics, are not susceptible to thermal runaway, and do not require additional room ventilation.

In addition, the energy storage module's usage can be controlled safely by monitoring the status of the internal batteries and communicating the outcome to a linked external battery management system or controlling unit.

3. Quick Charge

The high power output construction of rechargeable olivine-type lithium-ion iron phosphate batteries facilitates a charge of 90% or more in just one hour.

4. High Scalability

Variables such as the voltage and capacity can be customized for different applications by connecting multiple modules either in series or in parallel. Furthermore, at 19 inches (2U), the module size is also suitable for fitting to standard computer server racks.

5. Eco-Friendly

Iron (lithium iron phosphate) is used as the electrode material, thus enabling reduced environmental impact in comparison to rechargeable lithium-ion batteries that instead use rare metals with extremely limited reserves, and which are therefore in low supply.



■ Specifications

Energy Storage Module – IJ1001M



Features:

- Powered by Sony's iron phosphate cells, "Fortelion"
- A built-in self-monitoring function detects any abnormality within the module itself
- Multiple modules can easily be connected either in series or in parallel

	IJ1001M	Remarks
Energy / Capacity	1.2kWh / 24Ah	Nominal: 0.2ItA, +23deg. C
Nominal Voltage	51.2V	-
Maximum Discharge Current / Power	50A / 2.5kW	-
Weight	Approx. 17kg	-
Dimensions	W432 * D421 * H80 mm	Excluding attachment fixtures

Controller Unit – IJ1002C and IJ1004C (Designed for IJ1001M)



Features:

- Up to 16 modules can be connected to a controller
- Ready compatibility with major battery inverters
- Safely shuts down current in case of alarm
- Integrates connected module status and exports the information through communication interface

	IJ1002C	IJ1004C
Operating Voltage Range	30 to 60V	
Maximum Continuous Current / Power	100A / 5kW	180A / 9kW
Communication Interface	CAN / RS232C	
Weight	Approx. 8kg-	
Dimensions	W432 * D421 * H80 mm	

*Excluding attachment fixtures

*Specifications are subject to change without notice

■ Energy Storage System (ESS) Configuration Example

Sony ESS is a comprehensive package for a reliable and self-sufficient electricity supply. With the combination of two controllers of max output current of 100A and 180A and scalable storage modules, it allows precise design of power and capacity range according to your individual needs. It's an ideal solution to increase the self consumption of Solar PV, in return reduce electricity bill.

Energy Storage System

