

The Battery Matrix from IBC SOLAR provides you with an overview of the possible configurations of storage systems for photovoltaic systems. Based on our current portfolio of inverters and lithium-ion storage systems, you will find the right solution for every application.

In both overviews, our storage solutions are already divided into the two common voltage ranges.

Low voltage 48V (LV)

Low-voltage battery storage systems – a proven technology that is also used for so-called island systems. As the name suggests, these systems have an output voltage of 48 volts, also known colloquially as low voltage. Very high capacities can thus be built up by parallel connection.

High voltage (HV)

High-voltage technology – a new method of module interconnection for battery storage systems that has now proven its worth. With this technology, the individual battery modules are connected in series. This results in nominal voltage levels of well over 400V, which brings with it various advantages. Among other things, the entire storage system benefits from reduced conversion losses and higher efficiency. In combination with the current hybrid inverters, this results in an efficient and contemporary storage system.






























Low voltage 48V (LV)

- ✓ compatible
 - no compatibility
 - ✓ planned
 - ✓ compatible with restrictions
- emergency/backup power function possible, according to the inverter manufacturer's specifications.
1 The distinction between the emergency and backup power functions must be observed in accordance with the technical characteristics of the respective manufacturers.

Low voltage 48V (LV)

- compatible
- no compatibility
- planned
- compatible with restrictions
- emergency/backup power function possible, according to the inverter manufacturer's specifications.

The distinction between the emergency and backup power functions must be observed in accordance with the technical characteristics of the respective manufacturers.

							Storage ma- nufacturer	LG Energy Solution <small>ESS Battery Division</small>			BYD		GOODWE
							Product name	RESU 6.5	RESU 10	RESU 12	Battery-Box LVS	Battery-Box LVL	Lynx Home U
							Cell Chemistry	NMC	NMC	NMC	LFP	LFP	LFP
							Usable capacity [kWh]	5.9	8.8	11.7	4.0 - 24.0	15.4	5.4
							Parallel circuit	max. 2	max. 2	max. 2	max. 16	max. 64	max. 6
Inverter manufac- turer	Product name	Nominal AC power [kW]	Quantity phases	Type of inverter	Emergency/ backup power capability (with accessories if necessary'	System integration	Product picture						
	Sunny Island	4.4 6.0 8.0	1~/3~ (bei 3 x SI)	Battery	—	AC							—
GOODWE	GW-xx S-BP	3.6 5.0	1~	Battery		AC							
	GW-xx-ES	3.6 5.0	1~	Hybrid		DC							

High voltage (HV)

- ✓

compatible
- no compatibility
- ✓

planned
- ✓

compatible with restrictions
- ⚡










































































emergency/backup power function possible, according to the inverter manufacturer's specifications.
- 1

The distinction between the emergency and backup power functions must be observed in accordance with the technical characteristics of the respective manufacturers.
- 2

Retrofittable in existing PV systems from Fronius, SMA and Solaredge
- 3

Power in mains parallel operation; backup power see manufacturer's documentation
- 4

Additional hardware may be required

							Storage manufacturer	LG Energy Solution ESS Battery Division			BYD		SUNGROW Clean power for all	ENPHASE	
							Product name	RESU Flex	RESU 10 H PRIME	RESU 16 H PRIME	Battery-Box Premium HVS	Battery-Box Premium HVM	SBR	Encharge 3T	Encharge 10T
							Cell Chemistry	NMC	NMC	NMC	LFP	LFP	LFP	LFP ²	LFP ²
							Usable capacity [kWh]	8.6 - 17.2	9.6	16	5.1 - 12.8	8.3 - 22.1	9.6 - 25.6	3.5	10.5
							Parallel circuit ⁴	max. 2	max. 2	max. 2	max. 3	max. 3	—	max. 20	max. 6
Inverter manufacturer	Product name	Nominal AC power [kW] ³	Quantity phases	Type of inverter	Emergency/ backup power capability (with accessories if necessary) ¹	System integration	Product picture								
	Sunny Boy Storage	2.5	1~	Battery		AC		—	—	—	 2 - 4 Modules	—	—	—	—
	Sunny Boy Storage	3.7 5.0 6.0	1~	Battery		AC					 2 - 4 Modules	 4 - 8 Modules	—	—	—
	Sunny Tripower Smart Energy	5.0 6.0 8.0 10.0	3~	Hybrid		DC			—	—	 Parallel operation not possible.	 4 - 8 Modules Parallel operation not possible.	—	—	—
	Primo Gen24 Plus	3.0 3.6 4.0 4.6 5.0 6.0	1~	Hybrid		DC		 RESU Flex with 17.2 kWh is not compatible.	—	—	 2 - 3 Modules	 4 - 7 Modules	—	—	—
	Symo Gen24 Plus	3.0 4.0 5.0 6.0 8.0 10.0	3~	Hybrid		DC			—	—	 2 - 4 Modules	 4 - 8 Modules	—	—	—
	SHx.xRT	5.0 6.0 8.0 10.0	3~	Hybrid		DC		—	—	—		 4 - 8 Modules		—	—
	SHx.xRS	3.0 3.6 4.0 5.0 6.0	1~	Hybrid		DC		—	—	—	 2 - 4 Modules			—	—
	GWx-ET Plus + & 16A Version	5.0 6.5 8.0 10.0	3~	Hybrid		DC			—	—		 4 - 8 Modules	—	—	—
	GWx-ET	15.0 20.0 25.0 29.9	3~	Hybrid		DC		—	—	—		 4 - 8 Modules	—	—	—
	GWx-BT	5.0 6.0 8.0 10.0	3~	Battery		AC		—	—	—		 4 - 8 Modules	—	—	—
	GWx-BH	3.6 5.0 6.0	1~	Battery		AC		—	—	—	 2 - 4 Modules		—	—	—
	GWx-EH	3.6 5.0 6.0	1~	Hybrid		DC		—	—	—	 2 - 4 Modules		—	—	—
	IQ7+	scalable	1~/3~	Modul	—	AC		—	—	—	—	—	—		
	IQ7A	scalable	1~/3~	Modul	—	AC		—	—	—	—	—	—	