



BYD Battery-Box Premium LVS Minimum Configuration List

Version 1.1



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Disclaimer

Information in this document is subject to change without notice. Every effort has been made to make this document complete, accurate, and up-to-date. However, BYD may need to make some improvements under certain circumstances without advance notice. Please take the latest version of this document at our websites into account.

Note:

- 1. Max. 64 modules can be connected in parallel, below requirements shall be fulfilled when parallel connection: a) if only one single Tower with 5 or 6 modules, the maximum loading shall be no more than 12.8kW; b) if more than one Tower, each Tower shall be no more than 4 modules.
- 2. Inrush Power: Each Inverter has their Inrush power for off grid applications, please make sure to consult with inverter brands for the right value of correspondences; On-grid with full backup power equals to off-grid inrush power use
- 3. Configurations marked in grey are not released yet and are not allowed to be installed yet. Those configurations are planned and will follow soon. The actual configuration upon official release might change.



1. Minimum Configuration List On-Grid Single Phase

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	
LVS	≥1	≥1	SI 4.4M	SMA	
	≥1	≥1	SI 6.0H		
	≥1	≥1	SI 8.0H		
	*Planned configuration, subject to change.				
	≥1	≥1	Multiplus 48/3000/35	Victron	
	≥1	≥1	Multiplus 48/5000/70		
	≥1	≥1	Multigrid 48/3000/35		
	≥1	≥1	Quattro 48/5000/70-100/100		
	≥1	≥1	Quattro 48/8000/110-100/100		
	≥1	≥1	Quattro 48/10000/140- 100/100		
	≥1	≥1	Quattro 48/15000/200- 100/100		
	≥1	≥1	Easysolar 48/3000/35-50 MPPT150/70		
	≥1	≥1	Easysolar 48/5000/70-100 MPPT150/100		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52				
	≥1	≥1	SPMC480-AU	Selectronic	
	≥1	≥1	SPMC481-AU		
	≥1	≥1	SPMC482-AU		
	*Planned configuration, subject to change.				
	≥1	≥1	GW3648D-ES	GoodWe	
	≥1	≥1	GW5048D-ES		
≥1	≥1	GW2500-BP			
≥1	≥1	GW3048-EM			
≥1	≥1	GW3648-EM			
≥1	≥1	GW5048-EM			
≥1	≥1	GW3600S-BP			
≥1	≥1	GW5000S-BP			
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Goodwe inverters firmware ≥ V11					

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand
LVS	≥1	≥1	XTS1400-48	Studer
	≥1	≥1	XTM2600-48	
	≥1	≥1	XTM4000-48	
	≥1	≥1	XTH6000-48	
	≥1	≥1	XTH8000-48	
	≥1	≥1	VT-65	
	≥1	≥1	VT-80	
	≥1	≥1	VS-70	
	≥1	≥1	VS-120	
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664			
	≥1	≥1	SH5K-30	Sungrow
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Sungrow inverters firmware ≥ SH5K-30_V01_V004			



2. Minimum Configuration List On-Grid Single Phase With Full Power Back Up

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	
LVS	≥2	≥1	SI 4.4M	SMA	
	≥4	≥1	SI 6.0H		
	≥4	≥1	SI 8.0H		
	*Planned configuration, subject to change.				
	≥1	≥1	Multiplus 48/3000/35	Victron	
	≥2	≥1	Multiplus 48/5000/70		
	≥1	≥1	Multigrid 48/3000/35		
	≥2	≥1	Quattro 48/5000/70-100/100		
	≥4	≥1	Quattro 48/8000/110-100/100		
	≥5	≥1	Quattro 48/10000/140- 100/100		
	≥7	≥2	Quattro 48/15000/200- 100/100		
	≥1	≥1	Easysolar 48/3000/35-50 MPPT150/70		
	≥2	≥1	Easysolar 48/5000/70-100 MPPT150/100		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52				
	≥2	≥1	SPMC480-AU	Selectronic	
	≥2	≥1	SPMC481-AU		
	≥3	≥1	SPMC482-AU		
	*Planned configuration, subject to change.				
	≥2	≥1	GW3648D-ES	GoodWe	
	≥2	≥1	GW5048D-ES		
	≥2	≥1	GW3048-EM		
	≥2	≥1	GW3648-EM		
	≥2	≥1	GW5048-EM		
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Goodwe inverters firmware ≥ V11					

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand
LVS	≥1	≥1	XTS1400-48	Studer
	≥1	≥1	XTM2600-48	
	≥2	≥1	XTM4000-48	
	≥3	≥1	XTH6000-48	
	≥4	≥1	XTH8000-48	
	≥1	≥1	VT-65	
	≥2	≥1	VT-80	
	≥2	≥1	VS-70	
	≥3	≥1	VS-120	
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664			
≥1	≥1	SH5K-30	Sungrow	
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Sungrow inverters firmware ≥ SH5K-30_V01_V004				



3. Minimum Configuration List Off-Grid Single Phase

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	
LVS	≥2	≥1	SI 4.4M	SMA	
	≥4	≥1	SI 6.0H		
	≥4	≥1	SI 8.0H		
	*Planned configuration, subject to change.				
	≥1	≥1	Multiplus 48/3000/35	Victron	
	≥2	≥1	Multiplus 48/5000/70		
	≥1	≥1	Multigrid 48/3000/35		
	≥2	≥1	Quattro 48/5000/70-100/100		
	≥4	≥1	Quattro 48/8000/110-100/100		
	≥5	≥1	Quattro 48/10000/140- 100/100		
	≥7	≥2	Quattro 48/15000/200- 100/100		
	≥1	≥1	Easysolar 48/3000/35-50 MPPT150/70		
	≥2	≥1	Easysolar 48/5000/70-100 MPPT150/100		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52				
	≥2	≥1	SPMC480-AU	Selectronic	
	≥2	≥1	SPMC481-AU		
	≥3	≥1	SPMC482-AU		
	*Planned configuration, subject to change.				
	≥2	≥1	GW3648D-ES	GoodWe	
	≥2	≥1	GW5048D-ES		
	≥2	≥1	GW3048-EM		
	≥2	≥1	GW3648-EM		
	≥2	≥1	GW5048-EM		
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Goodwe inverters firmware ≥ V11					



BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand
LVS	≥2	≥1	XTS1400-48	Studer
	≥2	≥1	XTM2600-48	
	≥3	≥1	XTM4000-48	
	≥4	≥1	XTH6000-48	
	≥5	≥1	XTH8000-48	
	≥1	≥1	VT-65	
	≥2	≥1	VT-80	
	≥2	≥1	VS-70	
	≥3	≥1	VS-120	
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664			
	≥1	≥1	SH5K-30	Sungrow
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Sungrow inverters firmware ≥ SH5K-30_V01_V004				



4. Minimum Configuration List Off-Grid Single Phase Inrush Use

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	Remarks for Inrush Power	
LVS	≥2	≥1	SI 4.4M	SMA	5.5kw 3 seconds	
	≥3	≥1	SI 6.0H		11kw 3 seconds	
	≥3	≥1	SI 8.0H		11kw 3 seconds	
	*Planned configuration, subject to change.					
	≥2	≥1	Multiplus 48/3000/35	Victron	6kw 5 seconds	
	≥3	≥1	Multiplus 48/5000/70		10kw 5 seconds	
	≥2	≥1	Multigrid 48/3000/35		6kw 5 seconds	
	≥3	≥1	Quattro 48/5000/70-100/100		10kw 5 seconds	
	≥4	≥1	Quattro 48/8000/110-100/100		16kw 5 seconds	
	≥5	≥2	Quattro 48/10000/140- 100/100		20kw 5 seconds	
	≥7	≥2	Quattro 48/15000/200- 100/100		25kw 5 seconds	
	≥2	≥1	Easysolar 48/3000/35-50 MPPT150/70		6kw 5 seconds	
	≥3	≥1	Easysolar 48/5000/70-100 MPPT150/100		10kw 5 seconds	
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52					
	≥2	≥1	SPMC480-AU	Selectronic	6kw 60 seconds	
	≥3	≥1	SPMC481-AU		12kw 30 seconds	
	≥5	≥2	SPMC482-AU		18kw 30 seconds	
	*Planned configuration, subject to change.					
	≥2	≥1	GW3648D-ES	GoodWe		
	≥2	≥1	GW5048D-ES			
	≥1	≥1	GW3048-EM			
≥2	≥1	GW3648-EM				
≥2	≥1	GW5048-EM				
≥2	≥1	GW3600S-BP				
≥2	≥1	GW5000S-BP				
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Goodwe inverters firmware ≥ V11						



BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	Remarks for Inrush Power	
LVS	≥1	≥1	XTS1400-48	Studer	2.8kw 5 seconds	
	≥2	≥1	XTM2600-48		6.5kw 5 seconds	
	≥3	≥1	XTM4000-48		10.5kw 5 seconds	
	≥4	≥1	XTH6000-48		15 kw 5 seconds	
	≥5	≥2	XTH8000-48		21 kw 5 seconds	
	≥1	≥1	VT-65			
	≥2	≥1	VT-80			
	≥2	≥1	VS-70			
	≥3	≥1	VS-120			
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664					
	≥1	≥1	SH5K-30	Sungrow		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Sungrow inverters firmware ≥ SH5K-30_V01_V004					



5. Minimum Configuration List On-Grid Three Phase

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	
LVS	≥1	≥1	SI 4.4M	SMA	
	≥1	≥1	SI 6.0H		
	≥1	≥1	SI 8.0H		
	*Planned configuration, subject to change.				
	≥1	≥1	Multiplus 48/3000/35	Victron	
	≥1	≥1	Multiplus 48/5000/70		
	≥1	≥1	Multigrid 48/3000/35		
	≥1	≥1	Quattro 48/5000/70-100/100		
	≥1	≥1	Quattro 48/8000/110-100/100		
	≥1	≥1	Quattro 48/10000/140- 100/100		
	≥1	≥1	Quattro 48/15000/200- 100/100		
	≥1	≥1	Easysolar 48/3000/35-50 MPPT150/70		
	≥1	≥1	Easysolar 48/5000/70-100 MPPT150/100		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52				
	≥1	≥1	SPMC480-AU	Selectronic	
	≥1	≥1	SPMC481-AU		
	≥1	≥1	SPMC482-AU		
*Planned configuration, subject to change.					

LVS	≥1	≥1	XTS1400-48	Studer
	≥1	≥1	XTM2600-48	
	≥1	≥1	XTM4000-48	
	≥1	≥1	XTH6000-48	
	≥1	≥1	XTH8000-48	
	≥1	≥1	VT-65	
	≥1	≥1	VT-80	
	≥1	≥1	VS-70	
	≥1	≥1	VS-120	
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664			
	≥1	1	SE5K-RWS	Solaredge*
	≥1	1	SE7K-RWS	
	≥1	1	SE8K-RWS	
	≥1	1	SE10K-RWS	
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Solaredge inverters firmware ≥ 4.11			
* Multiple towers are not supported				

6. Minimum Configuration List On-Grid Three Phase With Full Backup Power

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	
LVS	≥8	≥2	SI 4.4M	SMA	
	≥12	≥3	SI 6.0H		
	≥12	≥3	SI 8.0H		
	*Planned configuration, subject to change.				
	≥6	≥2	Multiplus 48/3000/35	Victron	
	≥8	≥2	Multiplus 48/5000/70		
	≥6	≥2	Multigrid 48/3000/35		
	≥8	≥2	Quattro 48/5000/70-100/100		
	≥12	≥3	Quattro 48/8000/110-100/100		
	≥16	≥4	Quattro 48/10000/140- 100/100		
	≥24	≥6	Quattro 48/15000/200- 100/100		
	≥4	≥1	Easysolar 48/3000/35-50 MPPT150/70		
	≥8	≥2	Easysolar 48/5000/70-100 MPPT150/100		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52				
	≥6	≥2	SPMC480-AU	Selectronic	
	≥8	≥2	SPMC481-AU		
≥12	≥3	SPMC482-AU			
*Planned configuration, subject to change.					
LVS	≥1	≥1	XTS1400-48	Studer	
	≥2	≥1	XTM2600-48		
	≥3	≥1	XTM4000-48		
	≥4	≥1	XTH6000-48		
	≥6	≥2	XTH8000-48		
	≥1	≥1	VT-65		
	≥2	≥1	VT-80		
	≥2	≥1	VS-70		
	≥3	≥1	VS-120		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664				

7. Minimum Configuration List Off-Grid Three Phase Typical Use

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	
LVS	≥4	≥1	SI 4.4M	SMA	
	≥6	≥2	SI 6.0H		
	≥8	≥2	SI 8.0H		
	*Planned configuration, subject to change.				
	≥4	≥1	Multiplus 48/3000/35	Victron	
	≥6	≥2	Multiplus 48/5000/70		
	≥4	≥1	Multigrid 48/3000/35		
	≥6	≥2	Quattro 48/5000/70-100/100		
	≥8	≥2	Quattro 48/8000/110-100/100		
	≥12	≥3	Quattro 48/10000/140- 100/100		
	≥16	≥4	Quattro 48/15000/200- 100/100		
	≥4	≥1	Easysolar 48/3000/35-50 MPPT150/70		
	≥8	≥2	Easysolar 48/5000/70-100 MPPT150/100		
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52				
	≥4	≥1	SPMC480-AU	Selectronic	
	≥4	≥1	SPMC481-AU		
	≥8	≥2	SPMC482-AU		
	*Planned configuration, subject to change.				
	≥1	≥1	XTS1400-48	Studer	
	≥2	≥1	XTM2600-48		
	≥3	≥1	XTM4000-48		
	≥4	≥1	XTH6000-48		
	≥6	≥2	XTH8000-48		
≥1	≥1	VT-65			
≥2	≥1	VT-80			
≥2	≥1	VS-70			
≥3	≥1	VS-120			
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664					

8. Minimum Configuration List Off-Grid Three Phase Inrush Use

BYD Battery-Box Premium	Module Number	Tower Number	Compatible Inverter Model	Compatible Inverter Brand	Remarks for Inrush Power	
LVS	≥8	≥2	SI 4.4M	SMA	3*5.5kw 3 seconds	
	≥12	≥3	SI 6.0H		3*11kw 3 seconds	
	≥12	≥3	SI 8.0H		3*11kw 3 seconds	
	*Planned configuration, subject to change.					
	≥6	≥2	Multiplus 48/3000/35	Victron	3*6kw 5 seconds	
	≥8	≥2	Multiplus 48/5000/70		3*10kw 5 seconds	
	≥6	≥2	Multigrid 48/3000/35		3*6kw 5 seconds	
	≥8	≥2	Quattro 48/5000/70-100/100		3*10kw 5 seconds	
	≥12	≥3	Quattro 48/8000/110-100/100		3*16kw 5 seconds	
	≥16	≥4	Quattro 48/10000/140- 100/100		3*20kw 5 seconds	
	≥24	≥6	Quattro 48/15000/200- 100/100		3*25kw 5 seconds	
	≥4	≥1	Easysolar 48/3000/35-50 MPPT150/70		3*6kw 5 seconds	
	≥8	≥2	Easysolar 48/5000/70-100 MPPT150/100		3*10kw 5 seconds	
	Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Victron inverters firmware ≥ V2.52					
	≥6	≥2	SPMC480-AU	Selectronic	3*6kw 60 seconds	
	≥8	≥2	SPMC481-AU		3*12kw 30 seconds	
	≥12	≥3	SPMC482-AU		3*18kw 30 seconds	
	*Planned configuration, subject to change.					
	≥2	≥1	XTS1400-48	Studer	3*2.8kw 5 seconds	
	≥3	≥1	XTM2600-48		3*6.5kw 5 seconds	
	≥8	≥2	XTM4000-48		3*10.5kw 5 seconds	
	≥12	≥3	XTH6000-48		3*15 kw 5 seconds	
	≥15	≥3	XTH8000-48		3*21 kw 5 seconds	
≥4	≥1	VT-65				
≥4	≥1	VT-80				
≥4	≥1	VS-70				
≥8	≥2	VS-120				
Released. Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Studer inverters firmware ≥ R664						

Contact Information

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