

# BYD BATTERY-BOX PREMIUM LVL MINIMUM CONFIGURATION LIST – V1.5



**Note: Max. 64 Systems in parallel connection** // [DE] max. 64 Systeme in Parallelschaltung // [ES] Max. 64 sistemas en conexión en paralelo // [IT] Max. 64 Sistemi in connessione parallela

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| 1. Minimum Configuration List ON Grid                               |  |  |               |
|---|--|--|---------------|
| DE: Minimale Konfiguration ON Grid                                  |  |  |               |
| ES: Configuración mínima para sistemas conectados a red             |  |  |               |
| IT: Configurazione minima per sistemi in rete                       |  |  |               |
| Compatible Inverter (1- / 3-phase)                                  | Minimum Configuration for Single Phase                                 | Minimum Configuration for Three Phase                          |               |
| DE: Kompatibler Wechselrichter                                      | DE: Minimale Konfiguration für eine Phase                              | DE: Minimale Konfiguration für drei Phasen                     |               |
| ES: Inversores compatibles  | ES: Cantidad mínima de baterías para sistemas monofásicos a red        | ES: Cantidad mínima de unidades para sistemas trifásicos a red |               |
| IT: Inverter compatibile  | IT: Numero minimo di batterie per sistemi monofase in rete             | IT: Numero minimo di batterie per sistemi trifase in rete      |               |
| SMA   | SI 4.4M  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | SI 6.0M  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | SI 8.0M  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ 1.3.1R   |  |               |
| Victron   | Multiplus 48/3000/35   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Multiplus 48/5000/70   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Multigrid 48/3000/35   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Quattro 48/5000/70-100/100   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Quattro 48/8000/110-100/100  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Quattro 48/10000/140- 100/100  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Quattro 48/15000/200- 100/100  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Easysolar 48/3000/35-50 MPPT150/70                                     | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Easysolar 48/5000/70-100 MPPT150/100                                   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
| Battery firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V2.52 |  |  |               |
| Selectronic   | SPMC480-AU   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | SPMC481-AU   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | SPMC482-AU   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4 |
|   | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V12.19   |  |               |
| Studer  | XTS1400-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | XTM2600-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | XTM4000-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | XTH6000-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | XTH8000-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | VT-65  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | VT-80  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | VS-70  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | VS-120   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4 |
|   | Battery firmware: BMU ≥ V1.9, BMS ≥ V1.3; Inverter firmware ≥ R664     |  |               |
| GoodWe  | ES Series  | ≥1 x LVL 15.4  | /             |
|   | EM Series  | ≥1 x LVL 15.4  | /             |
|   | BP/SBP Series  | ≥1 x LVL 15.4  | /             |
|   | Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Inverter firmware ≥ ARM V11 |  |               |



BYD Company Limited  
www.bydbatterybox.com  
Global Sales: batteryboxgrp@byd.com  
Global Service: bboxeservice@byd.com

Battery-Box EU Service Partner  
EFT-Systems GmbH  
www.eft-systems.de  
info@eft-systems.de

Battery-Box AU Service Partner BYD US Service  
Alps Power Pty Ltd  
www.alppower.com.au  
service@alppower.com.au  
bboxusservice@byd.com

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## 2. Minimum Configuration List ON Grid + Backup

DE: Minimale Konfiguration für Notstrom

ES: Configuración mínima para sistemas energía de emergencia

IT: Configurazione minima per sistemi di alimentazione di emergenza

| Compatible Inverter (1- / 3-phase)                                  |  | Minimum Configuration for Single Phase                                     | Minimum Configuration for Three Phase                                  |
|---|--|--|--|
| DE: Kompatibler Wechselrichter                                      |  | DE: Minimale Konfiguration für eine Phase                                  | DE: Minimale Konfiguration für drei Phasen                             |
| ES: Inversores compatibles  |  | ES: Cantidad mínima de baterías para sistemas monofásicos a red con backup | ES: Cantidad mínima de baterías para sistemas trifase a red con backup |
| IT: Inverter compatibile  |  | IT: Numero minimo di batterie per sistemi monofase in rete con backup      | IT: Numero minimo di batterie per sistemi trifase in rete con backup   |
| SMA   | SI 4.4M  | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | SI 6.0M  | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | SI 8.0M  | ≥1 x LVL 15.4  | ≥3 x LVL 15.4  |
|   | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ 1.3.1R   |  |  |
| Victron   | Multiplus 48/3000/35   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | Multiplus 48/5000/70   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | Multigrid 48/3000/35   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | Quattro 48/5000/70-100/100   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | Quattro 48/8000/110-100/100  | ≥1 x LVL 15.4  | ≥3 x LVL 15.4  |
|   | Quattro 48/10000/140- 100/100  | ≥1 x LVL 15.4  | ≥4 x LVL 15.4  |
|   | Quattro 48/15000/200- 100/100  | ≥2 x LVL 15.4  | ≥6 x LVL 15.4  |
|   | Easysolar 48/3000/35-50 MPPT150/70                                     | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
| Easysolar 48/5000/70-100 MPPT150/100                                | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |  |
| Battery firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V2.52 |  |  |  |
| Selectronic   | SPMC480-AU   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | SPMC481-AU   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | SPMC482-AU   | ≥1 x LVL 15.4  | ≥3 x LVL 15.4  |
|   | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V12.19   |  |  |
| Studer  | XTS1400-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|   | XTM2600-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|   | XTM4000-48   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|   | XTH6000-48   | ≥1 x LVL 15.4  | ≥3 x LVL 15.4  |
|   | XTH8000-48   | ≥2 x LVL 15.4  | ≥4 x LVL 15.4  |
|   | VT-65  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|   | VT-80  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|   | VS-70  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|   | VS-120   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
| Battery firmware: BMU ≥ V1.9, BMS ≥ V1.3; Inverter firmware ≥ R664  |  |  |  |
| GoodWe  | ES Series  | ≥1 x LVL 15.4  | /  |
|   | EM Series  | ≥1 x LVL 15.4  | /  |
|   | BP/SBP Series  | ≥1 x LVL 15.4  | /  |
|   | Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Inverter firmware ≥ ARM V11 |  |  |



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 www.bydbatterybox.com  
 Global Sales: batteryboxgrp@byd.com  
 Global Service: bboxeservice@byd.com

**Battery-Box EU Service Partner**  
 EFT-Systems GmbH  
 www.eft-systems.de  
 info@eft-systems.de

**Battery-Box AU Service Partner** **BYD US Service**  
 Alps Power Pty Ltd  
 www.alppower.com.au  
 service@alppower.com.au  
 bboxeservice@byd.com

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### 3. Minimum Configuration List OFF Grid Typical Use

DE: Minimale Konfiguration Off Grid für den typischen Gebrauch  
 ES: Configuración mínima para sistemas aislados, uso convencional  
 IT: Configurazione minima per sistemi in isola, uso tipico

| Compatible Inverter (1- / 3-phase)   |  | Minimum Configuration for Single Phase   | Minimum Configuration for Three Phase  |
|--|--|--|--|
| DE: Kompatibler Wechselrichter<br>ES: Inversores compatibles<br>IT: Inverter compatibile |  | DE: Minimale Konfiguration für eine Phase<br>ES: Cantidad mínima de baterías para sistemas monofásicos aisladas<br>IT: Numero minimo di batterie per sistemi monofase in isola | DE: Minimale Konfiguration für drei Phasen<br>ES: Cantidad mínima de baterías para sistemas trifase aisladas<br>IT: Numero minimo di batterie per sistemi trifase in isola |
| SMA  | SI 4.4M  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | SI 6.0M  | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | SI 8.0M  | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ 1.3.1R   |  |  |
| Victron  | Multiplus 48/3000/35   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | Multiplus 48/5000/70   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | Multigrid 48/3000/35   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | Quattro 48/5000/70-100/100   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | Quattro 48/8000/110-100/100  | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | Quattro 48/10000/140-100/100   | ≥1 x LVL 15.4  | ≥3 x LVL 15.4  |
|  | Quattro 48/15000/200-100/100   | ≥2 x LVL 15.4  | ≥4 x LVL 15.4  |
|  | Easysolar 48/3000/35-50 MPPT150/70                                     | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | Easysolar 48/5000/70-100 MPPT150/100                                   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
| Battery firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V2.52                      |  |  |  |
| Selectronic  | SPMC480-AU   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | SPMC481-AU   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | SPMC482-AU   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V12.19   |  |  |
| Studer   | XTS1400-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | XTM2600-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | XTM4000-48   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | XTH6000-48   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | XTH8000-48   | ≥1 x LVL 15.4  | ≥2 x LVL 15.4  |
|  | VT-65  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | VT-80  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | VS-70  | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | VS-120   | ≥1 x LVL 15.4  | ≥1 x LVL 15.4  |
|  | Battery firmware: BMU ≥ V1.9, BMS ≥ V1.3; Inverter firmware ≥ R664     |  |  |
| GoodWe   | ES Series  | ≥1 x LVL 15.4  | /  |
|  | EM Series  | ≥1 x LVL 15.4  | /  |
|  | BP/SBP Series  | ≥1 x LVL 15.4  | /  |
|  | Battery firmware: BMU ≥ V1.16, BMS ≥ V1.8; Inverter firmware ≥ ARM V11 |  |  |



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 EFT-Systems GmbH  
 www.eft-systems.de  
 info@eft-systems.de

**Battery-Box AU Service Partner** **BYD US Service**  
 Alps Power Pty Ltd  
 www.alppower.com.au  
 service@alppower.com.au

bboxeservice@byd.com

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| <b>4. Minimum Configuration List OFF Grid for Inrush Power Use</b>  |  |   |  |
|---|--|---|--|
| DE: Minimale Konfiguration Off Grid, für hohe Einschaltströme<br>ES: Configuración mínima para sistemas aislados para soportar picos de corriente máximos<br>IT: Configurazione minima per sistemi in isola per potenza di pico ammissibile |  |   |  |
| <b>Compatible Inverter (1- / 3-phase)</b>   |  | <b>Minimum Configuration for Single Phase</b>   | <b>Minimum Configuration for Three Phase (remarks for inrush power)</b>  |
| DE: Kompatibler Wechselrichter<br>ES: Inversores compatibles<br>IT: Inverter compatibile  |  | DE: Minimale Konfiguration für eine Phase<br>ES: Cantidad mínima de baterías para sistema monofase aislada con pico<br>IT: Numero minimo di batterie per sistemi monofase in isola con pico | DE: Minimale Konfiguration für drei Phasen<br>ES: Cantidad mínima de baterías para sistemas trifase aisladas con pico<br>IT: Numero minimo di batterie per sistemi trifase in isola con pico |
| SMA   | SI 4.4M  | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (5.5 kW, 3 sec per Inverter)  |
|   | SI 6.0M  | ≥ 1 x LVL 15.4  | ≥ 3 x LVL 15.4 (11 kW, 3 sec per Inverter)   |
|   | SI 8.0M  | ≥ 1 x LVL 15.4  | ≥ 3 x LVL 15.4 (11 kW, 3 sec per Inverter)   |
|   | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ 1.3.1R |   |  |
| Victron   | Multiplus 48/3000/35   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (6 kW, 5 sec per Inverter)  |
|   | Multiplus 48/5000/70   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (10 kW, 5 sec per Inverter)   |
|   | Multigrad 48/3000/35   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (6 kW, 5 sec per Inverter)  |
|   | Quattro 48/5000/70-100/100   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (10 kW, 5 sec per Inverter)   |
|   | Quattro 48/8000/110-100/100  | ≥ 1 x LVL 15.4  | ≥ 3 x LVL 15.4 (16 kW, 5 sec per Inverter)   |
|   | Quattro 48/10000/140- 100/100  | ≥ 1 x LVL 15.4  | ≥ 4 x LVL 15.4 (20 kW, 5 sec per Inverter)   |
|   | Quattro 48/15000/200- 100/100  | ≥ 2 x LVL 15.4  | ≥ 6 x LVL 15.4 (25 kW, 5 sec per Inverter)   |
|   | Easysolar 48/3000/35-50 MPPT150/70                                   | ≥ 1 x LVL 15.4  | ≥ 1 x LVL 15.4 (6 kW, 5 sec per Inverter)  |
|   | Easysolar 48/5000/70-100 MPPT150/100                                 | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (10 kW, 5 sec per Inverter)   |
| Battery firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V2.52   |  |   |  |
| Selectronic   | SPMC480-AU   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (9.4 kW, 30 sec per Inverter)   |
|   | SPMC481-AU   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (12 kW, 30 sec per Inverter)  |
|   | SPMC482-AU   | ≥ 1 x LVL 15.4  | ≥ 3 x LVL 15.4 (18 kW, 30 sec per Inverter)  |
|   | Battery Firmware: BMU ≥ V1.7, BMS ≥ V1.3; Inverter firmware ≥ V12.19 |   |  |
| Studer  | XTS1400-48   | ≥ 1 x LVL 15.4  | ≥ 1 x LVL 15.4 (2.8 kVA, 5 sec per Inverter)   |
|   | XTM2600-48   | ≥ 1 x LVL 15.4  | ≥ 1 x LVL 15.4 (6.5 kVA, 5 sec per Inverter)   |
|   | XTM4000-48   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4 (10.5 kVA, 5 sec per Inverter)  |
|   | XTH6000-48   | ≥ 1 x LVL 15.4  | ≥ 3 x LVL 15.4 (15 kVA, 5 sec per Inverter)  |
|   | XTH8000-48   | ≥ 2 x LVL 15.4  | ≥ 4 x LVL 15.4 (21 kVA, 5 sec per Inverter)  |
|   | VT-65  | ≥ 1 x LVL 15.4  | ≥ 1 x LVL 15.4   |
|   | VT-80  | ≥ 1 x LVL 15.4  | ≥ 1 x LVL 15.4   |
|   | VS-70  | ≥ 1 x LVL 15.4  | ≥ 1 x LVL 15.4   |
|   | VS-120   | ≥ 1 x LVL 15.4  | ≥ 2 x LVL 15.4   |
|   | Battery firmware: BMU ≥ V1.9, BMS ≥ V1.3; Inverter firmware ≥ R664   |   |  |

**Note for Inrush Power: Each inverter has their inrush power for off grid applications. Please make sure to consult the inverter manufacturer for the right value of correspondences.**

DE: Hinweis zu Einschaltströmen: Jeder Wechselrichter hat seine Einschaltströme für OFF-Grid Anwendungen. Bitte erkundigen Sie sich beim Hersteller des Wechselrichters nach dem richtigen Korrespondenzwert.

ES: Nota sobre los picos de corriente: Cada inversor presenta unas características distintas con respecto a los picos de corriente permitidos así que es recomendable consultar con el fabricante de inversores que la información de esta tabla es la más reciente.

IT: Note per Potenza di Pico Ammissibile: ogni inverter ha la sua Potenza di Pico Ammissibile per applicazioni in isola (Off-Grid). Consulta i valori correspondent dell'inverter usato.



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info@eft-systems.de

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Alps Power Pty Ltd  
www.alpspower.com.au  
service@alpspower.com.au

bboxeservice@byd.com

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