

# BATTERY-BOX PREMIUM HVL (US)

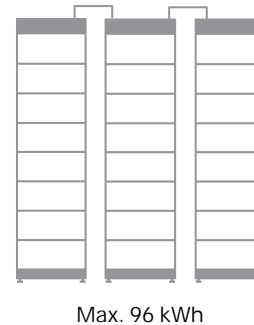
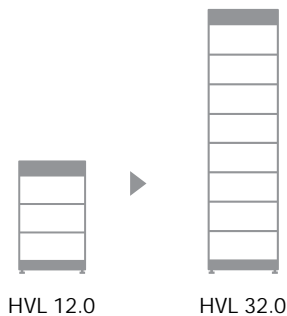
- Capable of High-Powered Emergency-Backup and Off-Grid Functionality
- Highest Efficiency Thanks to a Real High-Voltage Series Connection
- The Patented Modular Plug Design Requires no Internal Wiring and Allows for Maximum Flexibility and Ease of Use
- Cobalt Free Lithium Iron Phosphate (LFP) Battery: Maximum Safety, Life Cycle, and Power
- Compatible with Leading High Voltage Battery Inverters
- Highest Safety Standards



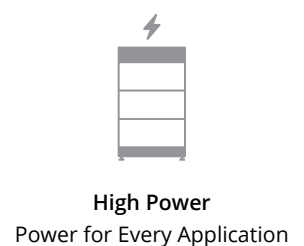
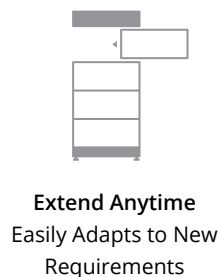
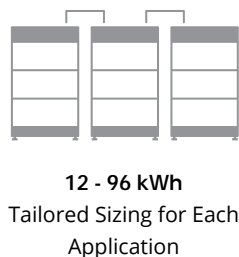
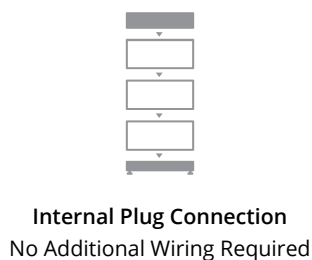
## BATTERY-BOX PREMIUM HVL

One Battery-Box Premium HVL is composed of 3 to 8 HVL battery modules that are connected in series to achieve a usable capacity of 12 to 32 kWh.

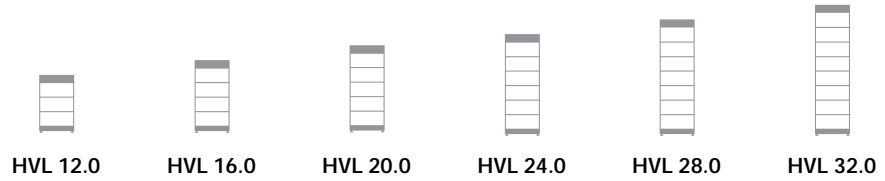
Additionally, direct parallel connection of up to 3 identical Battery-Box Premium HVL allows a maximum capacity of 96 kWh. Ability to scale by adding HVL modules later.



## FLEXIBLE, EFFICIENT, SIMPLE



## TECHNICAL PARAMETERS PREMIUM HVL



|                                    | HVL 12.0  | HVL 16.0                 | HVL 20.0                 | HVL 24.0                 | HVL 28.0                 | HVL 32.0                 |
|------------------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Battery Module                     | HVL (4 kWh, 51.2 V, 99.2 lb)                                  |                          |                          |                          |                          |                          |
| Number of Modules                  | 3   | 4                        | 5                        | 6                        | 7                        | 8                        |
| Usable Energy <sup>[1]</sup>       | 12 kWh  | 16 kWh                   | 20 kWh                   | 24 kWh                   | 28 kWh                   | 32 kWh                   |
| Max Output Current <sup>[2]</sup>  | 50 A  | 50 A                     | 50 A                     | 50 A                     | 50 A                     | 50 A                     |
| Peak Output Current <sup>[2]</sup> | 75 A, 3 s   | 75 A, 3 s                | 75 A, 3 s                | 75 A, 3 s                | 75 A, 3 s                | 75 A, 3 s                |
| Nominal Voltage                    | 153.6 V   | 204.8 V                  | 256 V                    | 307.2 V                  | 358.4 V                  | 409.6 V                  |
| Operating Voltage                  | 120-173 V   | 160-230 V                | 200-288 V                | 240-345 V                | 280-403 V                | 320-460 V                |
| Dimensions (H/W/D)                 | 39.2× 23.0×<br>11.7 inch                                      | 48.3× 23.0×<br>11.7 inch | 57.5× 23.0×<br>11.7 inch | 66.7× 23.0×<br>11.7 inch | 75.9× 23.0×<br>11.7 inch | 85.0× 23.0×<br>11.7 inch |
| Weight                             | 330.7 lb  | 429.9 lb                 | 529.1 lb                 | 628.3 lb                 | 727.5 lb                 | 826.7 lb                 |
| Operating Temperature              | 14 °F to 122 °F   |                          |                          |                          |                          |                          |
| Battery Cell Technology            | Lithium Iron Phosphate (cobalt-free)                          |                          |                          |                          |                          |                          |
| Communication                      | CAN/ RS485  |                          |                          |                          |                          |                          |
| Enclosure Protection Rating        | NEMA 3R   |                          |                          |                          |                          |                          |
| Round-trip Efficiency              | ≥ 96%   |                          |                          |                          |                          |                          |
| Certification                      | UL9540/ UL9540A/ UL1973/ IEC60730/ FCC/ UN38.3/ OGPE/ CEC     |                          |                          |                          |                          |                          |
| Applications                       | ON Grid/ ON Grid+Backup/ OFF Grid                             |                          |                          |                          |                          |                          |
| Warranty <sup>[3]</sup>            | 10 Years  |                          |                          |                          |                          |                          |
| Compatible Inverters               | Refer to BYD Battery-Box Premium HVL Compatible Inverter List |                          |                          |                          |                          |                          |

[1] DC Usable Energy, Test conditions: 100 % DOD, 0.2 C charge & discharge at 77 °F. System Usable Energy may vary with different inverter brands.

[2] Charge derating will occur between 14 °F and 41 °F.

[3] Condition apply. Refer to BYD Battery-Box Premium HVL Limited Warranty.



Quick Guidance



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V 1.13 EN

# BYD BATTERY-BOX PREMIUM HVL COMPATIBLE INVERTER LIST – V1.4



| Inverter      |                         | Module Quantity | Minimum Firmware Version |             |      |                     |             |      |
|---------------|-------------------------|-----------------|--------------------------|-------------|------|---------------------|-------------|------|
|               |                         |                 | Single Tower             |             |      | Parallel Connection |             |      |
|               |                         |                 | Inverter                 | Battery-Box |      | Inverter            | Battery-Box |      |
|               |                         |                 |                          | BMU         | BMS  |                     | BMU         | BMS  |
| HVL           |                         |                 |                          |             |      |                     |             |      |
| <b>SMA</b>    | SBSE 3.8/ 4.8/ 5.8/ 7.7 | 3-8             | 1.00.00.R                | 3.22        | 3.27 | 1.00.00.R           | 3.22        | 3.27 |
| <b>Solis</b>  | S6-EH1P(3.8-11.4)K-H-US | 3-8             | A2                       | 3.22        | 3.27 | A2                  | 3.22        | 3.27 |
| <b>GoodWe</b> | A-ES Series             | 3-8             | V17                      | 3.16        | 3.23 | V17                 | 3.16        | 3.23 |
|               | A-BP Series             | 3-8             | V17                      | 3.16        | 3.23 | V17                 | 3.16        | 3.23 |

**Note:**

- Installation before official release is not allowed.
- Always install the latest firmware on the Battery-Box!
- Requirements for Parallel Connection: Maximum three battery systems could be connected in parallel; Every tower connected in parallel requires the same module quantity.

**The Information in this document is subject to change without notice. Please take the latest version of this document at our websites into account.**



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