

# BATTERY-BOX PREMIUM HVS / HVM



- 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 1 and 3 Phase High Voltage Battery Inverters
- Two Distinct Modules to Cover the Complete Range of System Sizes
- Highest Safety Standards like VDE 2510-50

## BATTERY-BOX PREMIUM HVS

One Battery-Box Premium HVS is composed of 2 to 5 HVS battery modules that are connected in series to achieve a usable capacity of 5.1 to 12.8 kWh.

Additionally, direct parallel connection of up to 3 identical Battery-Box Premium HVS allows a maximum capacity of 38.4 kWh.

Ability to scale by adding HVS modules or parallel HVS stacks later.

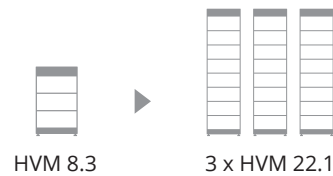


## BATTERY-BOX PREMIUM HVM

One Battery-Box Premium HVM is composed of 3 to 8 HVM battery modules that are connected in series to achieve a usable capacity of 8.3 to 22.1 kWh.

Additionally, direct parallel connection of up to 3 identical Battery-Box Premium HVM allows a maximum capacity of 66.2 kWh.

Ability to scale by adding HVM modules or parallel HVM stacks later.



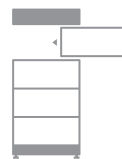
## FLEXIBLE, EFFICIENT, SIMPLE



**Internal Plug Connection**  
No Additional Wiring Required



**5.1 - 66.2 kWh**  
Tailored Sizing for Each Application











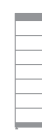
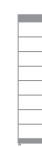
**Extend Anytime**  
Easily Adapts to New Requirements



**High Power**  
Power for Every Application

## TECHNICAL PARAMETERS PREMIUM HVS / HVM

|                         | <br>HVS 5.1 | <br>HVS 7.7 | <br>HVS 10.2 | <br>HVS 12.8 |
|-------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Battery Module          | HVS (2.56 kWh, 102.4 V, 38 kg)                                                               |                                                                                              |                                                                                                 |                                                                                                 |
| Number of Modules       | 2                                                                                            | 3                                                                                            | 4                                                                                               | 5                                                                                               |
| Usable Energy [1]       | 5.12 kWh                                                                                     | 7.68 kWh                                                                                     | 10.24 kWh                                                                                       | 12.8 kWh                                                                                        |
| Max Output Current [2]  | 25 A                                                                                         | 25 A                                                                                         | 25 A                                                                                            | 25 A                                                                                            |
| Peak Output Current [2] | 50 A, 3 s                                                                                    | 50 A, 3 s                                                                                    | 50 A, 3 s                                                                                       | 50 A, 3 s                                                                                       |
| Nominal Voltage         | 204.8 V                                                                                      | 307.2 V                                                                                      | 409.6 V                                                                                         | 512 V                                                                                           |
| Operating Voltage       | 160~230.4 V                                                                                  | 240~345.6 V                                                                                  | 320~460.8 V                                                                                     | 400~576 V                                                                                       |
| Dimensions (H/W/D)      | 762x585x298 mm                                                                               | 995x585x298 mm                                                                               | 1228x585x298 mm                                                                                 | 1461x585x298 mm                                                                                 |
| Weight                  | 91 kg                                                                                        | 129 kg                                                                                       | 167 kg                                                                                          | 205 kg                                                                                          |

|                         | <br>HVM 8.3 | <br>HVM 11.0 | <br>HVM 13.8 | <br>HVM 16.6 | <br>HVM 19.3 | <br>HVM 22.1 |
|-------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Battery Module          | HVM (2.76 kWh, 51.2 V, 38 kg)                                                                 |                                                                                                |                                                                                                |                                                                                                  |                                                                                                  |                                                                                                  |
| Number of Modules       | 3                                                                                             | 4                                                                                              | 5                                                                                              | 6                                                                                                | 7                                                                                                | 8                                                                                                |
| Usable Energy [1]       | 8.28 kWh                                                                                      | 11.04 kWh                                                                                      | 13.80 kWh                                                                                      | 16.56 kWh                                                                                        | 19.32 kWh                                                                                        | 22.08 kWh                                                                                        |
| Max Output Current [2]  | 40 A                                                                                          | 40 A                                                                                           | 40 A                                                                                           | 40 A                                                                                             | 40 A                                                                                             | 40 A                                                                                             |
| Peak Output Current [2] | 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       | 120~172.8 V                                                                                   | 160~230.4 V                                                                                    | 200~288 V                                                                                      | 240~345.6 V                                                                                      | 280~403.2 V                                                                                      | 320~460.8 V                                                                                      |
| Dimensions (H/W/D)      | 995 x<br>585 x 298 mm                                                                         | 1228 x<br>585 x 298 mm                                                                         | 1461 x<br>585 x 298 mm                                                                         | 1694 x<br>585 x 298 mm                                                                           | 1927 x<br>585 x 298 mm                                                                           | 2160 x<br>585 x 298 mm                                                                           |
| Weight                  | 129 kg                                                                                        | 167 kg                                                                                         | 205 kg                                                                                         | 243 kg                                                                                           | 281 kg                                                                                           | 319 kg                                                                                           |

### HVS & HVM

|                             |                                                                     |
|-----------------------------|---------------------------------------------------------------------|
| Operating Temperature       | -10 °C to +50°C                                                     |
| Battery Cell Technology     | Lithium Iron Phosphate (cobalt-free)                                |
| Communication               | CAN/RS485                                                           |
| Enclosure Protection Rating | IP55                                                                |
| Round-trip Efficiency       | ≥96%                                                                |
| Certification               | VDE2510-50 / IEC62619 / CEC / CE / UN38.3                           |
| Applications                | ON Grid / ON Grid + Backup / OFF Grid                               |
| Warranty [3]                | 10 Years                                                            |
| Compatible Inverters        | Refer to BYD Battery-Box Premium HVS / HVM Compatible Inverter List |

[1] DC Usable Energy, Test conditions: 100% DOD, 0.2C charge & discharge at + 25 °C. System Usable Energy may vary with different inverter brands

[2] Power derating will occur between -10 °C and +0 °C

[3] Conditions apply. Refer to BYD Battery-Box Premium Limited Warranty Letter.

