# 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

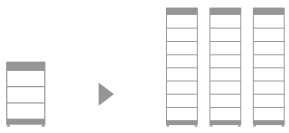
One Battery-Box Premium HVS is composed of 2 to 5 HVS battery modules that are connected in series to achieve a usable capacity of 5.1 to 12.8 kWh.
Additionally, direct parallel connection of up to 3 identical Battery-Box Premium HVS allows a maximum capacity of 38.4 kWh.
Ability to scale by adding HVS modules or parallel HVS stacks later.



HVS 5.1 — 3 x HVS 12.8

## 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.

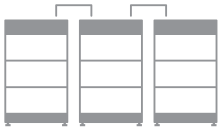


HVM 8.3 — 3 x HVM 22.1

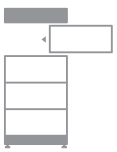
## FLEXIBLE, EFFICIENT, SIMPLE



**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

Battery Box

## TECHNICAL PARAMETERS **PREMIUM HVS / HVM**



| | HVS 5.1 | HVS 7.7 | HVS 10.2 | 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 | 160~240 V | 240~360 V | 320~480 V | 400~600 V |
| Dimensions (H/W/D) | 762x585x298 mm | 995x585x298 mm | 1228x585x298 mm | 1461x585x298 mm |
| Weight | 91 kg | 129 kg | 167 kg | 205 kg |



| | HVM 8.3 | HVM 11.0 | HVM 13.8 | HVM 16.6 | HVM 19.3 | 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] | 50 A | 50 A | 50 A | 50 A | 50 A | 50 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 | 120~177 V | 160~236 V | 200~295 V | 240~354 V | 280~413 V | 320~472 V |
| Dimensions (H/W/D) | 995 x 585 x 298 mm | 1228 x 585 x 298 mm | 1461 x 585 x 298 mm | 1694 x 585 x 298 mm | 1927 x 585 x 298 mm | 2160 x 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 +5 °C
[3] Conditions apply. Refer to BYD Battery-Box Premium Limited Warranty Letter.