

## Technical Comparison

# High Voltage Batteries

| SPECS                                  | GIV-BAT-HV 10.2                      | GIV-BAT-HV 13.6                      | GIV-BAT-HV 17.0                      | GIV-BAT-HV 20.4                      |
|----------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Capacity                               | 10.2 kWh / 51Ah                      | 13.6 kWh / 51Ah                      | 17.0 kWh / 51Ah                      | 20.4 kWh / 51Ah                      |
| Voltage                                | 230VDC                               | 307VDC                               | 384VDC                               | 460VDC                               |
| Current                                | 25A<br>Charge/Discharge              | 25A<br>Charge/Discharge              | 25A<br>Charge/Discharge              | 25A<br>Charge/Discharge              |
| Cell Technology                        | LiFePO <sub>4</sub>                  | LiFePO <sub>4</sub>                  | LiFePO <sub>4</sub>                  | LiFePO <sub>4</sub>                  |
| IP Grade                               | IP65                                 | IP65                                 | IP65                                 | IP65                                 |
| BMS                                    | Robust Multi Point<br>Monitoring BMS | Robust Multi Point<br>Monitoring BMS | Robust Multi Point<br>Monitoring BMS | Robust Multi Point<br>Monitoring BMS |
| Depth of Discharge                     | 100%                                 | 100%                                 | 100%                                 | 100%                                 |
| Operating Voltage Range                | 200 – 600V                           | 200 – 600V                           | 200 – 600V                           | 200 – 600V                           |
| Standard Charge /<br>Discharge         | 0.5C                                 | 0.5C                                 | 0.5C                                 | 0.5C                                 |
| Max. Charging Voltage                  | 262V                                 | 350V                                 | 438V                                 | 525V                                 |
| Max. Charging /<br>Discharging Current | 25A / 25A                            | 25A / 25A                            | 25A / 25A                            | 25A / 25A                            |
| Networking Interface                   | RS485                                | RS485                                | RS485                                | RS485                                |
| Communication Protocol                 | CAN BUS                              | CAN BUS                              | CAN BUS                              | CAN BUS                              |
| Qty of Batteries                       | 3                                    | 4                                    | 5                                    | 6                                    |
| Dimensions                             | 635H x 380D x<br>480W (mm)           | 785H x 380D x<br>480W (mm)           | 935H x 380D x<br>480W (mm)           | 1085H x 380D x<br>480W (mm)          |
| Weight                                 | 119.8 Kg                             | 155.3 Kg                             | 190.8 Kg                             | 226.3 Kg                             |
| Life Cycling                           | 12 Years                             | 12 Years                             | 12 Years                             | 12 Years                             |
| Charging Temperature                   | 0°C – 55°C                           | 0°C – 55°C                           | 0°C – 55°C                           | 0°C – 55°C                           |
| Discharging Temperature                | -10°C – 55°C                         | -10°C – 55°C                         | -10°C – 55°C                         | -10°C – 55°C                         |
| Storage Temperature                    | -30°C – 60°C                         | -30°C – 60°C                         | -30°C – 60°C                         | -30°C – 60°C                         |
| Warranty                               | 12 Years                             | 12 Years                             | 12 Years                             | 12 Years                             |
| Standard                               | UN 38.3,<br>IEC61000                 | UN 38.3,<br>IEC61000                 | UN 38.3,<br>IEC61000                 | UN 38.3,<br>IEC61000                 |