



# Specifications

## Lithium Power Plus 48 V 5.5 kWh

23-05-2022

### ARTICLE NUMBER

40290231

Lithium Power Plus 48 V 5.5 kWh - Horizontal

40290211

Lithium Power Plus 48 V 5.5 kWh - Tower/Vertical

### TECHNICAL SPECIFICATIONS

|                                                  |                                                  |
|--------------------------------------------------|--------------------------------------------------|
| Chemistry                                        | LiFePO <sub>4</sub>                              |
| Module configuration (12 V module)               | 4s1p                                             |
| Number of modules                                | 4                                                |
| Nominal voltage                                  | 48 V                                             |
| Open circuit voltage                             | 52,8 V                                           |
| Nominal capacity                                 | 105 Ah                                           |
| Nominal energy                                   | 5,5 kWh                                          |
| Cycle Life DOD 80%                               | >3500 cycles (at 1C charge / discharge, 80% DoD) |
| Self discharge                                   | <3% per month                                    |
| Weight modules (excl. aluminum cabinet), kg (lb) | 40 (88.2)                                        |

### CHARGE PARAMETERS

|                            |                |
|----------------------------|----------------|
| Charge method              | CCCV           |
| Maximum charge voltage     | 59,6 V         |
| Recommended charge voltage | 57,2 V         |
| Recommended charge current | 52,5 A (0.5 C) |
| Continuous charge current  | 105 A (1.0 C)  |

### DISCHARGE PARAMETERS

|                               |                             |
|-------------------------------|-----------------------------|
| Discharge cut-off voltage     | 43,2 V                      |
| Recommended discharge current | 52,5 A (0.5C)               |
| Maximum discharge current     | 105 A (1.0C)                |
| Discharge pulse current       | 210 A (2C 10 sec, SOC >60%) |
| Fuse protection               | 225 A T-class               |

**MECHANICAL**

|                                  |                            |
|----------------------------------|----------------------------|
| Power connections                | M10 stud, max 20NM         |
| Cable connections                | Option: Top or Bottom      |
| IP-Protection class              | IP 66 cell IP20 connection |
| Cooling                          | Natural air convection     |
| Module material                  | PC-ABS, UL94-V0            |
| Battery case material            | Aluminium Powdercoat       |
| Dimensions (l x w x h), mm       | 480 x 280 x 465 (540)      |
| Dimensions (l x w x h), inches   | 18,9 x 11 x 18,3 (21,3")   |
| Total weight module plus cabinet | ±55-60 kg / 121-132 lbs    |

**CONFIGURATION**

|                        |                       |
|------------------------|-----------------------|
| Series configuration   | No                    |
| Parallel configuration | Yes, up to 4 max      |
| Redundant mode         | Yes, using double BIM |

**ENVIRONMENTAL**

|                                 |                               |
|---------------------------------|-------------------------------|
| Operating temperature charge    | 0°C to 55 °C / 32°F to 131°F  |
| Operating temperature discharge | -20°C to 55°C / -4°F to 131°F |
| Storage temperature             | -20°C to 45°C / -4°F to 113°F |
| Humidity (Non-condensing)       | <95%                          |

**SAFETY**

|                                 |                                                                        |
|---------------------------------|------------------------------------------------------------------------|
| Battery Management System (BMS) | External WP-BIM module                                                 |
| Balancing                       | Passive method                                                         |
| Communication CAN-Bus           | whisperconnect/NMEA2000                                                |
| EMC: Emission                   | EN-IEC 61000-6-3:2007/A1:2011/C11:2012                                 |
| EMC: Immunity                   | EN-IEC 61000-6-1:2007                                                  |
| Low voltage directive           | EN 60335-1:2012/AC:2014                                                |
| Certifications                  | CE, FCC, UN 38.3, UL 1642 (Cells), UN ECE R10.06, EN/IEC 62620(ESTRIN) |
| Shipping classification         | UN3480                                                                 |