

# ENERGYDOCK

## THREE PHASE ENERGY POD RANGE

### TECHNICAL DATA SHEET

## ENERGY POD 3Ø 15kVA

### 15kWh / 30kWh / 45kWh

#### SHORT DESCRIPTION

The Energydock Energy Pod is a modular decentralized method of energy generation using the very latest technology in energy generation, energy storage methods and energy management control. It is equipped with low frequency Victron inverters and lithium iron phosphate batteries

The Energy Pod is quick to deploy and does not need large areas for establishment. It is a versatile but complex product that will allow various functions of implementation; be it to increase a mini-substation's capacity, perform as a simple UPS unit or as an integrated off-grid decentralized utility energy system. This modular configuration will allow you to develop your energy needs, as the need arises. The Energy Pod receives its generation from various sources, be it from solar generation in close vicinity, higher voltage DC distribution line, generators or limited grid supply. It will utilize all forms of incoming energy and stores it or distributes it accordingly to the priorities set in its programming.



#### 3Ø ENERGY POD GENERAL SPECIFICATIONS

|              |                                         |
|--------------|-----------------------------------------|
| Product code | EP3-15/15/M, EP3-15/30/M or EP3-15/45/M |
| Dimensions   | 1600mm (l) x 900mm (w) x 1500mm (h)     |
| Enclosure    | Ground mountable metal enclosure        |
| Installation | Indoor or outdoor                       |



| VICTRON MULTIPLUS II 48/5000/70-50 INVERTER/CHARGER (x3) |                                                                                                                                                                                                     |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PowerControl / PowerAssist                               | Yes                                                                                                                                                                                                 |
| Transfer switch                                          | 50 A per phase                                                                                                                                                                                      |
| Maximum AC input current                                 | 50 A per phase                                                                                                                                                                                      |
| INVERTER                                                 |                                                                                                                                                                                                     |
| DC input voltage range                                   | 48 V – 38 – 66 V                                                                                                                                                                                    |
| Output                                                   | Output voltage: 230 VAC $\pm$ 2% / Frequency: 50 HZ $\pm$ 0.1%                                                                                                                                      |
| Continuous output power at 25 °C                         | 5 000 VA / 4 000 W per phase                                                                                                                                                                        |
| Continuous output power at 40 °/60 °C                    | 3 700 W / 3 000 W per phase                                                                                                                                                                         |
| Max apparent feed-in power                               | 5000 VA per phase                                                                                                                                                                                   |
| Peak power                                               | 9 000 W per phase                                                                                                                                                                                   |
| Maximum efficiency                                       | 96%                                                                                                                                                                                                 |
| Zero load power                                          | 18 W                                                                                                                                                                                                |
| Zero load power in AES mode                              | 12 W                                                                                                                                                                                                |
| Zero load power in search mode                           | 2 W                                                                                                                                                                                                 |
| CHARGER                                                  |                                                                                                                                                                                                     |
| AC input                                                 | Input voltage range: 187 – 256 VAC / Input frequency: 45–65Hz                                                                                                                                       |
| Charge voltage absorption                                | 56.2 VDC                                                                                                                                                                                            |
| Charge voltage float                                     | 56.0 VDC                                                                                                                                                                                            |
| Storage mode                                             | 52.8 VDC                                                                                                                                                                                            |
| Max battery charge current                               | 70 A per phase DC                                                                                                                                                                                   |
| Battery temperature sensor                               | Yes                                                                                                                                                                                                 |
| GENERAL                                                  |                                                                                                                                                                                                     |
| Auxillary output                                         | 32 A                                                                                                                                                                                                |
| Programmable relay                                       | Yes                                                                                                                                                                                                 |
| Protection                                               | a) output short circuit<br>b) overload<br>c) battery voltage too high<br>d) battery voltage too low<br>e) temperature too high<br>f) 230 VAC on inverter output<br>g) input voltage ripple too high |
| VE.Bus communication Port                                | For parallel and three phase operation, remote monitoring & system integration                                                                                                                      |
| General purpose com. Port                                | 2 x                                                                                                                                                                                                 |
| Remote on-off                                            | Yes                                                                                                                                                                                                 |
| Operating temperature                                    | -40 to +65°C <i>fan assisted cooling</i> /Humidity max 95%                                                                                                                                          |
| STANDARDS                                                |                                                                                                                                                                                                     |
| Safety                                                   | EN-IEC 60335-1, EN-IEC 60335-2-29, EN-IEC 62109-1                                                                                                                                                   |
| Emission, Immunity                                       | EN 55014-1, EN 55014-2, EN-IEC 61000-3-2,<br>IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3, EN-IEC61000-3-3                                                                                           |



## Remote Management Specifications

| REMOTE MANAGEMENT & PROGRAMMING - VICTRON CERBO GX DEVICE |                                                 |
|-----------------------------------------------------------|-------------------------------------------------|
| Supply voltage                                            | 8 - 70 VDC                                      |
| VE.Direct ports (always isolated)                         | 3                                               |
| VE.Bus (always isolated)                                  | 2 paralleled RJ45 sockets                       |
| VE.Can                                                    | Yes - non isolated                              |
| Operating temperature range                               | -20 to +50°C                                    |
| Cable length                                              | 2m                                              |
| GX TOUCH 50 / GX TOUCH 70                                 |                                                 |
| Display Resolution                                        | GX Touch 50: 800 x 480, GX Touch 70: 1024 x 600 |

## Battery Specifications

When selecting the 15kVA/15kWh Energy Pod, the following specifications will be applicable:

| STORAGEDOCK LV-COM 15/300 LiFePO <sub>4</sub> BATTERY |                                               |
|-------------------------------------------------------|-----------------------------------------------|
| Battery type                                          | Grade A LiFePO <sub>4</sub> Prismatic cells   |
| Nominal voltage                                       | 51.2 VDC - 48V - 56 VDC                       |
| Nominal capacity                                      | 295 Ah                                        |
| Total energy capacity                                 | 15 kWh                                        |
| Energy capacity at 80% DoD                            | 12 kWh                                        |
| Maximum & constant current                            | 300 A                                         |
| Maximum charge current                                | 305 A for 5 seconds                           |
| Maximum discharge current                             | 355 A for 5 seconds / 305 A for 30 seconds    |
| Max recommended inverter size                         | 15 kVA                                        |
| Cycle life                                            | 6000 cycles @ 0.5C and 80% depth of discharge |

When selecting the 15kVA/30kWh Energy Pod, the following specifications will be applicable:

| STORAGEDOCK LV-COM 30/600 LiFePO <sub>4</sub> BATTERY |                                               |
|-------------------------------------------------------|-----------------------------------------------|
| Battery type                                          | Grade A LiFePO <sub>4</sub> Prismatic cells   |
| Nominal voltage                                       | 51.2 VDC - 48V - 56 VDC                       |
| Nominal capacity                                      | 590 Ah                                        |
| Total energy capacity                                 | 30 kWh                                        |
| Energy capacity at 80% DoD                            | 24 kWh                                        |
| Maximum & constant current                            | 600 A                                         |
| Maximum charge current                                | 610 A for 5 seconds                           |
| Maximum discharge current                             | 710 A for 5 seconds / 610 A for 30 seconds    |
| Max recommended inverter size                         | 30 kVA                                        |
| Cycle life                                            | 6000 cycles @ 0.5C and 80% depth of discharge |



When selecting the 15kVA/45kWh Energy Pod, the following specifications will be applicable:

| STORAGEDOCK LV-COM 45/900 LiFePO <sub>4</sub> BATTERY |                                               |
|-------------------------------------------------------|-----------------------------------------------|
| Battery type                                          | Grade A LiFePO <sub>4</sub> Prismatic cells   |
| Nominal voltage                                       | 51.2 VDC - 48V - 56 VDC                       |
| Nominal capacity                                      | 885 Ah                                        |
| Total energy capacity                                 | 45 kWh                                        |
| Energy capacity at 80% DoD                            | 36 kWh                                        |
| Maximum & constant current                            | 900 A                                         |
| Maximum charge current                                | 915 A for 5 seconds                           |
| Maximum discharge current                             | 1065 A for 5 seconds / 915 A for 30 seconds   |
| Max recommended inverter size                         | 45 kVA                                        |
| Cycle life                                            | 6000 cycles @ 0.5C and 80% depth of discharge |

- A minimum of 1 x 15 kWh batteries can be connected
- A maximum of 3 x 15 kWh batteries can be connected

## WARRANTIES

The following warranties are applicable to the major components within the Energy Pod:

- Victron inverters - 10 year warranty
- Victron Cerbo device - 10 year warranty
- Battery - 10 year warranty or 6000 cycles at 80% depth of discharge, whichever occurs first.

*For more information and videos,  
please scan the QR code below*

