

ENERGYDOCK

SINGLE PHASE ENERGY POD RANGE

TECHNICAL DATA SHEET ENERGY POD 1Ø 30kVA 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.



1Ø ENERGY POD GENERAL SPECIFICATIONS

Product code	EP1-30/30/Q or EP1-30/45/Q
Dimensions	1600mm (l) x 900mm (w) x 1500mm (h)
Enclosure	Ground mountable metal enclosure
Installation	Indoor or outdoor



VICTRON QUATTRO 48V INVERTER/CHARGER	
PowerControl / PowerAssist	Yes
Integrated transfer switch	Yes
AC inputs (x2)	Input voltage range: 187 – 256 VAC / Frequency: 45 – 65 Hz
Maximum feed through current	200 A – AC1 IN only
INVERTER	
DC input voltage range	38 – 66 V
Output	Output voltage: 230 VAC $\pm$ 2% / Frequency: 50 Hz $\pm$ 0.1%
Continuous output power at 25 °C	30 000 VA / 24 000 W
Continuous output power at 40 °/60 °C	20 000 W / 14 000 W
Peak power	50 000 W
Maximum efficiency	96%
Zero load power	220 W
Zero load power in AES mode	150 W
Zero load power in search mode	40 W
CHARGER	
Charge voltage absorption	56.2 VDC
Charge voltage float	56.0 VDC
Storage mode	52.8 VDC
Charge current house battery	400 A
Battery temperature sensor	Yes
GENERAL	
Auxillary output	100 A
Programmable relay	Yes, 3x per unit
Protection	a) output short circuit d) battery voltage too low b) overload e) temperature too high c) battery voltage too high f) 230 VAC on inverter output 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 per unit
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, 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 30kVA/30kWh Energy Pod, the following specifications will be applicable:

STORAGEDOCK LV-COM 30/600 LiFePO ₄ BATTERY	
Battery type	Grade A LiFePO ₄ 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 80% depth of discharge

When selecting the 30kVA/45kWh Energy Pod, the following specifications will be applicable:

STORAGEDOCK LV-COM 45/900 LiFePO ₄ BATTERY	
Battery type	Grade A LiFePO ₄ 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 80% depth of discharge



- A minimum of 2 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*

