

ENERGYDOCK

DC RANGE

TECHNICAL DATA SHEET DC RANGE

SHORT DESCRIPTION

To ensure the journey to sustainability for rural areas, a long-term intelligent device needed to be developed. With innovation in battery technology, we are proud to release our modular lithium phosphate DC energy system. This unit is a 640 Wh modular 12.8V DC energy system with a Smart Solar 100/20 MPPT charge controller. When considering this energy system, the crucial factor to decide upon would be the duration for which energy is needed from the system's storage.

Key features of this unit include: PV readiness, lithium iron phosphate battery, modularity (ability to add a secondary battery), Bluetooth monitoring, current limiting function, short circuit protection and easy installation.



DC UNIT GENERAL SPECIFICATIONS

Product code	DBLi1
Weight	19.6kg
Dimensions (L x W x D)	440 x 330 x 160mm
Case enclosure	Wall mountable metal enclosure, painted. Indoor/protected under-cover use

TECHNICAL SPECIFICATIONS STORAGE DOCK ES0.64K LiFePO₄ BATTERY

Battery type	Grade A LiFePO ₄ Prismatic Cells
Nominal Voltage	12.8 VDC
Nominal capacity	50 Ah
Total Energy Capacity	0.64 kWh
Energy Capacity at 80% DoD	0.512 kWh
Standard charge current	25 A



Max charge current	35 A
Charge voltage Bulk/Absorb	14.1 VDC
Float voltage	14.0 VDC
Standard discharge current	30 A
Max discharge current	50 A
Discharge cut-off voltage	12 V @ 0.005C
BMS	Charge: 80A / Discharge: 80A
Protection	2 x 40 Amp fuses
Operating temperature: Charge / Discharge	0 to 45° C / 0 to 55° C
Cycle life	4000 cycles at 0.5C 80% depth of discharge

TECHNICAL SPECIFICATIONS VICTRON SMARTSOLAR 100/20 MPPT	
Battery voltage (auto)	12 V
Rated charge current	20 A
Nominal PV power, 12V	290 W / 360 Wp
Max. PV short circuit current	20 A
Automatic load disconnect	Yes
Max. PV open circuit voltage	100 V
Peak efficiency	98%
Self-consumption – load on	26 mA / 20 mA / 19mA
Self-consumption – load off	10 mA / 8mA / 7mA
Charge voltage 'absorption'	14.1 V
Charge voltage 'float'	14.0 V
Charge algorithm	Multi-stage adaptive
Temperature compensation	-16mV /°C resp. -32 mV/°C
Max. continuous load current	20 A
Low voltage load disconnect	Battery Life algorithm
Low voltage load re-connect	Battery Life algorithm
Protection	Output short circuit / Over temperature
Operating temperature	0°C to 45°C (full rated output up to 40°C)
Humidity	95%, non-condensing
Data communication port	VE.Direct

For more information and videos, please scan the QR code

