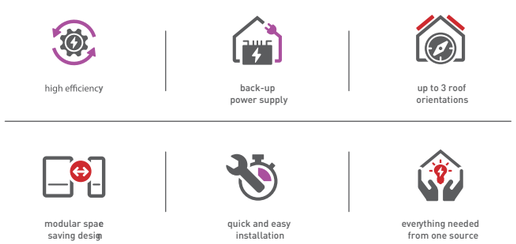


POWER STORAGE DC
US 8.0 | 8.0 PRO

DC-COUPLED HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



HIGH EFFICIENCY

- Intelligent energy storage management
- 3 independent MPP-trackers, switchable to parallel mode
- Transformerless topology
- Fanless cooling
- Dynamic power adjustment (1- 100%)
- Forecast based battery charging
- Back-up power supply

UNIQUE FLEXIBILITY

- Possible input voltage range between 120 V and 520 V
- Up to 2 high voltage batteries per inverter
- Modular and space saving design

EASY INSTALLATION

- Plug and play installation
- Quick commissioning with wizard via RCT Power App
- Integrated auto-transformer
- Separate Power Switch installation possible

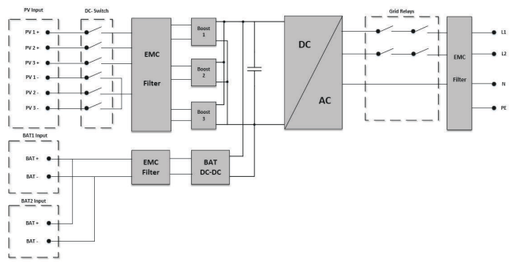
USER FRIENDLY COMMUNICATION

- Multicolor LED light path display
- Comfortable remote monitoring via App and Cloud
- Multifunction relay for connecting consumers

PREMIUM DESIGN

- German technology
- Flexible and sophisticated design
- Durable aluminium housing

BLOCK DIAGRAM



POWER STORAGE DC	US 8.0	US 8.0 PRO
DC INPUT		
Max. recommended DC power	12000 W	
MPPT	3	
Input per MPPT	1	
Maximum DC current per MPPT	14 A	
Rated DC voltage	360	
DC start up voltage	125 V	
MPP voltage range	120 V ~ 500 V	
Maximum Voltage DC	520 V	
Connector type	Quick Contact MC1-Evo 2	
BATTERY INPUT		
DC Voltage Range	120 V ~ 520 V	
Maximum charge / Discharge current	25 A	
Maximum charge / Discharge power	11550 W / 8000 W	
Connector-type	Wiring box	
AC OUTPUT (GRID-MODE)		
Real AC output power	8000 W	
Nominal AC current	34 A	
Frequency range	58 Hz to 62 Hz	
Grounding fault protection current	30 mA, 60 mA, 150 mA	
Rated AC voltage	240 Vac	
AC voltage range	211 V ~ 264 V	
Total harmonic distortion	< 3%	
Reactive power factor	Adjustable range 0.80 cap. . .0.80 ind	
Anti-islanding operation	YES	
Earth fault protection	RCD	
Type of AC connection	Wiring box	
AC OUTPUT (BACK-UP MODE)		
Maximum output power	8000 W*	
Rated AC voltage	120 / 240ZVac (Split Phase)	
Nominal AC current	34 A	
Nominal AC output frequency	60 Hz	
Total harmonic distortion	< 5 %	
Type of AC connection	Wiring box	
PERFORMANCE		
Stand-by consumption	< 4 W	
Maximum efficiency (PV-Grid)	97.94 %	
Maximum efficiency (Battery-Grid)	97.48 %	
CEC efficiency	97.5 %	
Topology	Transformerless	
OTHERS		
Dark Start Function	Yes	
PV Disconnect switch	Integrated in wiring box	
Data interface	BAT/CAN, WLAN, LAN, RS485	
Display	LED Light	
Cooling	Convection	
Max. operating altitude	6500 ft	
Max. relative humidity	5 - 95 % (non condensing)	
Typical noise	< 35 dB	
Operating temperature	-13 °F ~ 140 °F	
Enclosure type	NEMA Type 1	NEMA Type 3R
Size Power Inverter (HxWxD)	2.79' x 1.90' x 0.67'	
Size Power Switch (HxWxD)	2.79' x 1.05' x 0.67'	
Weight Power Inverter	75 lb	
Weight Power Switch	45 lb	

SAFETY / STANDARDS

Safety	UL1741 , CSA-C22.2 No. 107.1-16	AFCI	UL1699B (TYPE 1)
Grouding fault protection	UL1741 CRD	Grid support regulation	UL1741 SB , IEEE1547, California Rule 21
Software approval	UL1998	Storage system	UL9540
Anti-islanding protection	IEEE1547, IEEE1547.1	EMC	FCC part 15 Class B

* Need to use 3~6 pcs power battery stacks