

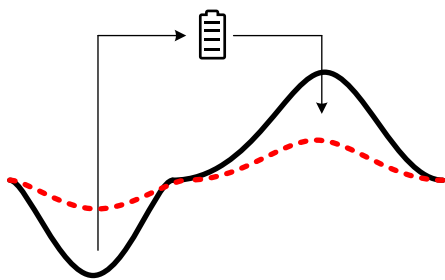
**Features**



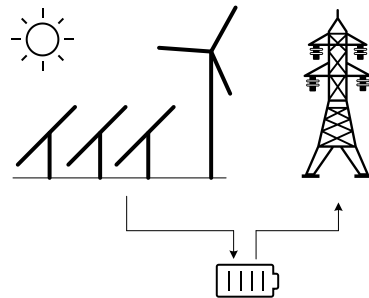
- 30kW High power density
- Bi-directional Power Conversion System
- Grid-support functions
- Virtual Synchronous Generator (VSG) technology optional for parallel off-grid application\*



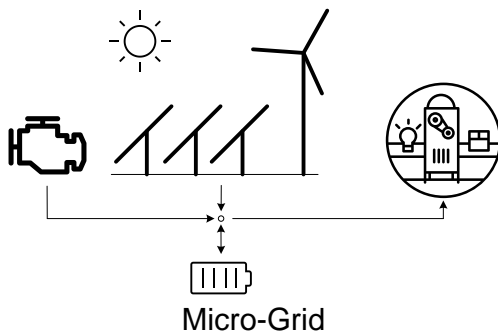
**Applications**



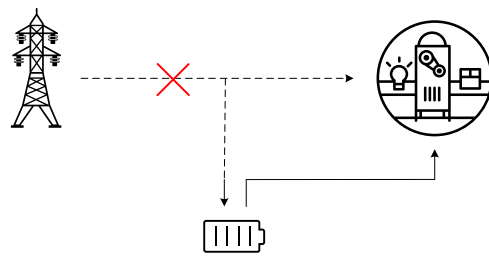
Peak Shifting/Demand Charge Management



Customer Self Supply



Micro-Grid



Backup Power

## Specification

### Utility-interactive Mode

Battery charge/discharge voltage	150V~750V (350~750V Full Power)
Battery charge/discharge current	0~90A
AC voltage	400V±10%
AC current	0~43.5A
Nominal power	30kW
AC frequency	50Hz(49.5Hz~50.5Hz)
AC PF	Listed: 0.8~1 leading or lagging (Controllable) Actual: 0.1~1 leading or lagging (Controllable)

### Stand-alone Mode

Battery discharge voltage	150V~750V (350~750V Full Power)
Battery discharge current	0~90A
AC output voltage	400V (±20% configurable)
AC output current	0~43.5A
Nominal AC output power	30kW (33kW max)
AC frequency	50Hz (±5% configurable)
AC output PF	Listed: 0.8~1 leading or lagging (Load-depend) Actual capability: 0.1~1 leading or lagging (Load-depend)
Overload Capability	105%~115% 10min; 115%~125% 1min; 125%~150% 200ms

### Physical

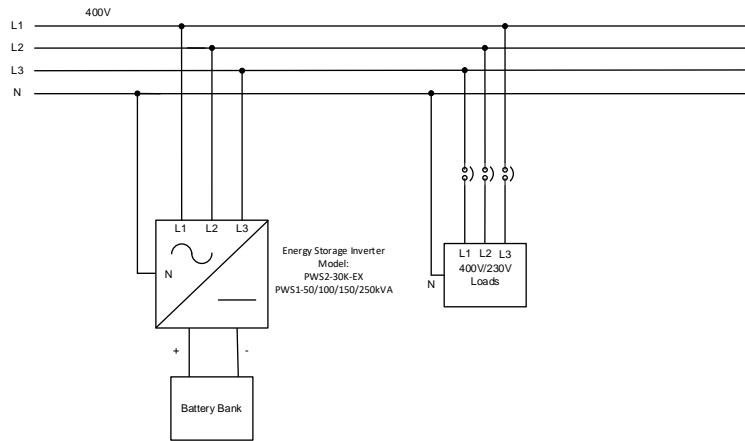
Cooling	Forced air cooling with replaceable fan module
Noise	<75dB
Enclosure	IP20/NEMA1
Max elevation	3000m/10000feet (> 2000m/6500feet derating)
Operating temp.	-20°C to 60°C (De-rating over 45°C)
Humidity	0~95% (No condensing)
Size (W*H*D)	440*173*596mm/ 17.3*6.8*23.46 inches
Weight	43kg/95Lbs
Installation	Wall-mounted

### Other

Peak efficiency	97.3%
CEC efficiency	96.5%
Protection	OTP, AC OVP/UVP, OFP/UFP, EPO, AC Phase Reverse, Fan/Relay Failure, OLP, GFDI, Anti-islanding

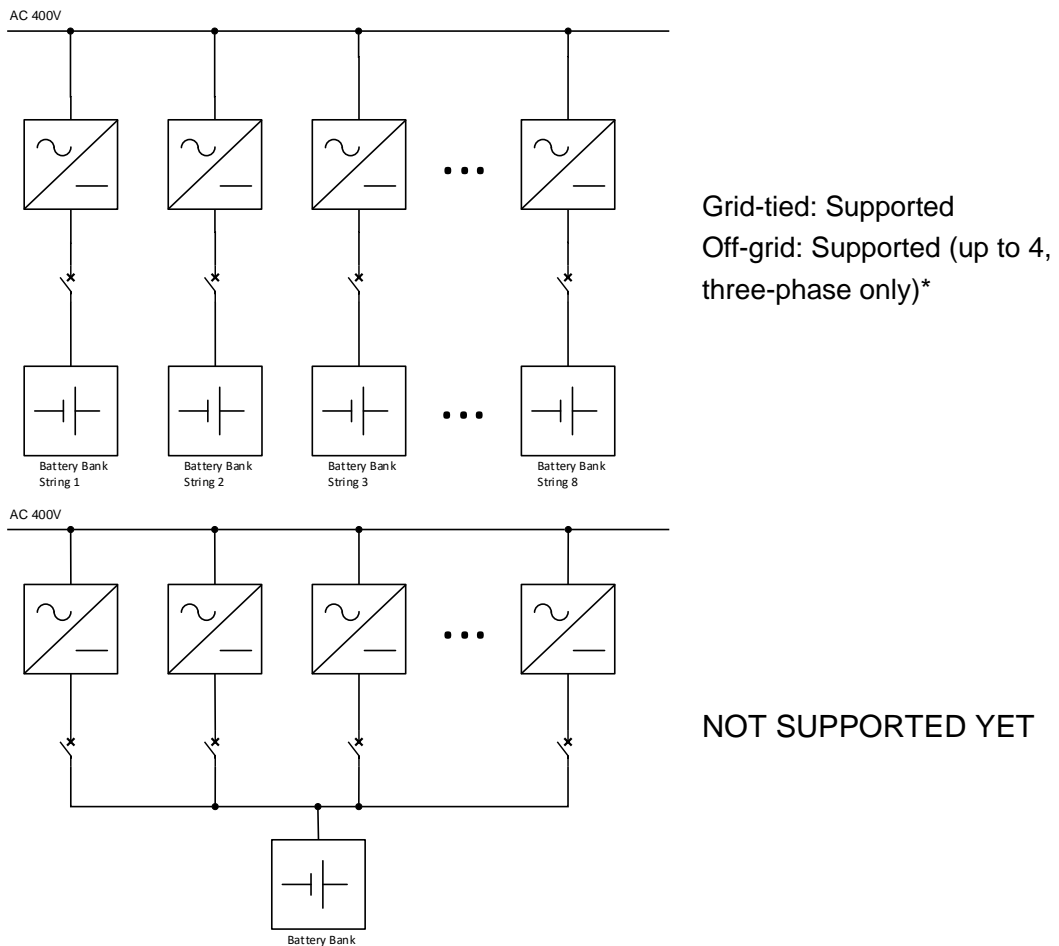
Configurable protection limits	Upper/Lower AC Voltage/Frequency limit, Battery EOD voltage.
AC connection	3-Phase 4-Wire
Isolation	Non-isolation
Certification	EN50549-1:2019
	G99-1
	IEC62477-1:2012
	EN62477-1:2012+A11
	IEC62040-1-1: 2002
	EN62040-1-1:2003
	TOR Erzeuger Typ A Version 1.0/08.19
	EN61000-6-2:2005
	EN61000-6-4:2007+A1
	AS/NZS 4777.2:2015
AS 62040.1.1-2003	
VDE-AR-N 4105:2018	
DIN VDE V 0124-100:2020	
<b>Short Circuit Current</b>	
Peak short circuit current	62A@20ms
Initial value of aperiodic current	62A@100ms
Initial symmetrical short circuit current	54A@250ms
Decaying component of short circuit current	54A@500ms
Time to trip	119ms
<b>Communication</b>	
Ethernet port	x1 RJ45 slot, for EMS, via MODBUS TCP/IP
RS-485 port	x1 RJ45 slot, for EMS or BMS, EMS via MODBUS RTU. Many kinds of BMS communication protocol supported
Remote emergency power off input	x1 RJ45 slot, adapts to NC switch input.

## Connection patterns



400V distribution system connection

## Parallel operation patterns



## Altitude Derating Factor

Altitude	Derating factor
<2000m	1
2100m	0.99
2200m	0.98
2300m	0.97
2400m	0.96
2500m	0.95
2600m	0.94
2700m	0.93
2800m	0.92
2900m	0.91
3000m	0.90

## Recommended Fuse and Wire Gauge

Location	Wire gauge	Fuse
DC (to battery)	2 AWG 35 mm <sup>2</sup>	200A 50kA
AC (to utility service)	6 AWG 10 mm <sup>2</sup>	90A 30kA

## Dimensions and Exterior

