

Features



- High power density
- Bi-directional Power Conversion System
- Wall-mounted, making a small footprint
- **Split-phase supported**
- Grid-support functions
- Virtual Synchronous Generator (VSG) technology optional for parallel off-grid application*



Specification

Utility-interactive Mode

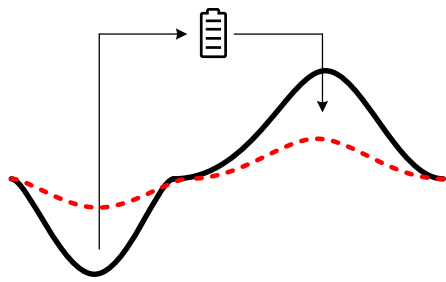
Battery charge/discharge voltage	200V~750V (350~750V Full Power in 3-phase mode, 220~750V Full Power in single phase mode)
Battery charge/discharge current	90A Max
AC voltage	480V (423V~528V), 3-phase or single phase
AC current	36A (3-phase) 43A (single phase mode)
Nominal power	30kW (3-phase) 20kW (single phase mode)
AC frequency	60Hz (59.5Hz~60.5Hz)
AC PF	Listed: 0.8~1 leading or lagging (Controllable) Actual: 0.1~1 leading or lagging (Controllable)

Stand-alone Mode

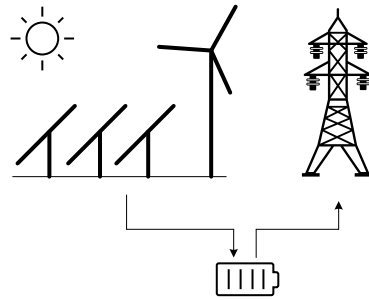
Battery discharge voltage	200V~750V (350~750V Full Power in 3-phase mode, 220~750V Full Power in single phase mode)
Battery discharge current	90A Max
AC output voltage	480V ($\pm 5\%$ configurable)** , 3-phase or single phase
AC output current	36A (3-phase) 43A (single phase mode)
Nominal AC output power	30kW (3-phase) 20kW (single phase mode)

AC frequency	60Hz
AC output PF	Listed: 0.8~1 leading or lagging (Load-depend) Actual: 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	<65dB
Enclosure	IP32/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)	470*660*176mm/ 18.5*26*6.95 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+N+PE Split-phase (Extra transformer required, derated to 20kW)
Isolation	Non-isolation
Certification	ETL listed conforming to UL1741/UL1741SA, CPUC RULE 21, IEEE1547 CEC (CA gosolar) listed

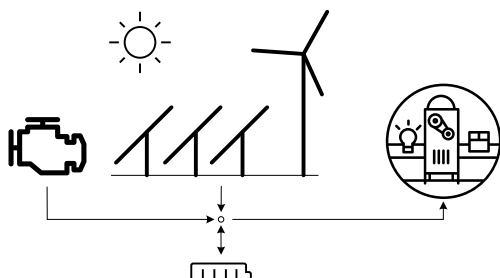
Applications



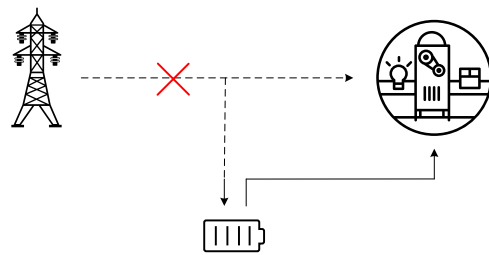
Peak Shifting/Demand Charge Management



Customer Self Supply

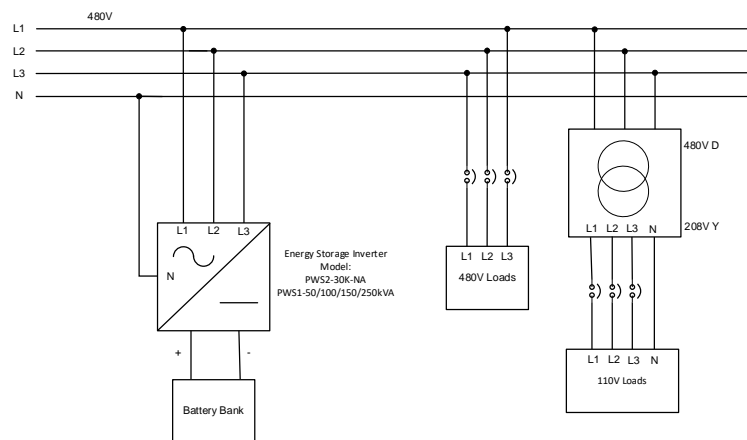


Micro-Grid

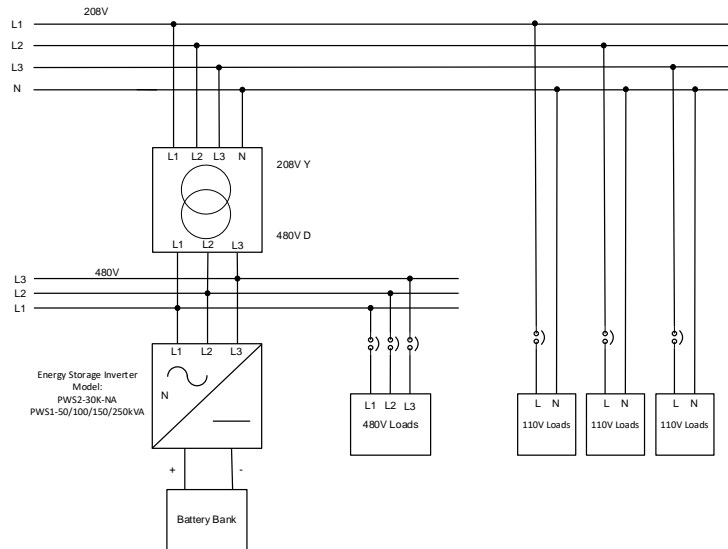


Backup Power

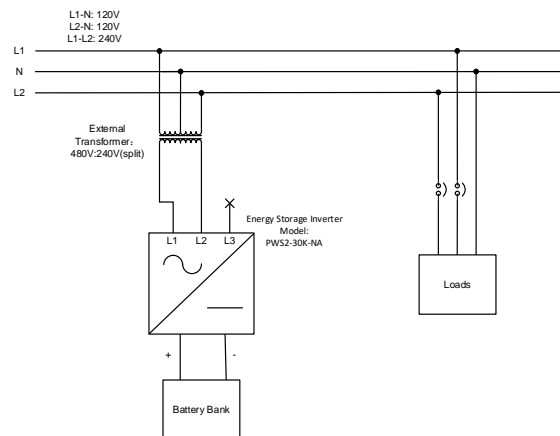
Distribution system connection patterns



480V distribution system connection

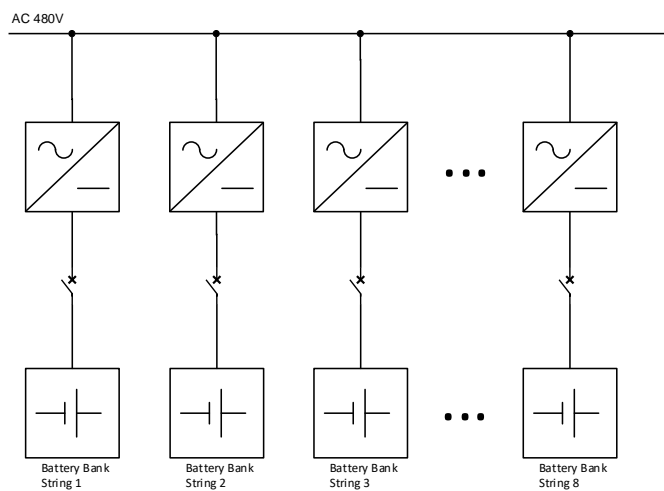


208V distribution system connection

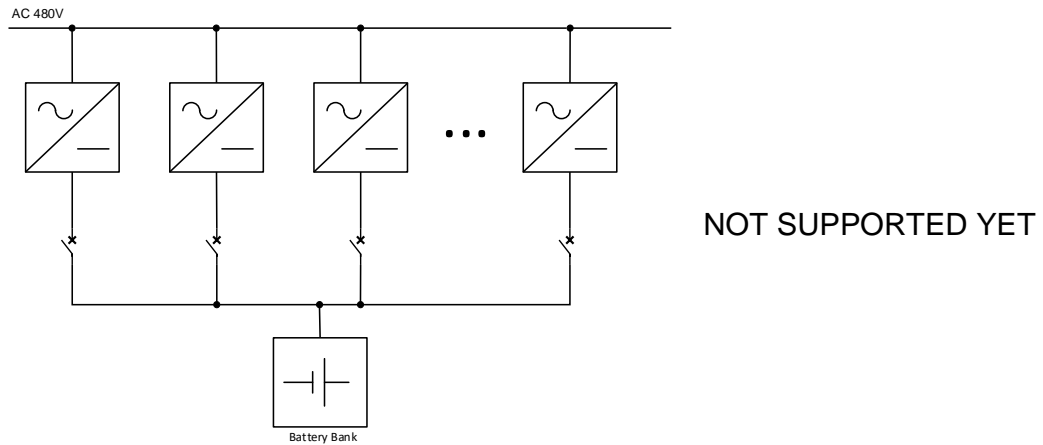


240/120V split-phase system connection

Parallel operation connection patterns



Grid-tied: Supported
Off-grid: Supported (up to 6)



* in three-phase three-wire only

** the neutral terminal of PWS2-30K-NA cannot support too much current, if 277V single phase loads in a 480V 3-phase system are used in stand-alone mode, an isolation transformer is required to provide the neutral current capability.