

Apogee 16.5Kwh Ground Power Unit (GPU)



1. Application Scope

This product is Safety Ground Power Unit (GPU), This specification specifies the specifications, technical points, and safety precautions.

2. Main Function

- (1). This product provides single phase AC120V/240V stable and sufficient voltage and capacity.
- (2). This product made with safety Lithium Iron Phosphate battery cell, No fire, No explosion.
- (3). This product provides overcharge voltage, overcharge current, low voltage, over temperature and short circuit of the safety protection. And various security mechanisms such as protection.
- (4). This product provides voltage equalization during charging.
- (5). This Product support to quickly charging and multi-charging mode of grid, solar, generator.
- (6). Battery BMS has the functions of providing sleep design, fault alarm and capacitance display. And have RS485 communication interface enables remote monitoring.
- (7). It complies with safety regulations such as UL-1642, BSMI, CE, UN38.3 (transport).

GPU Specification:

Nominal Battery System Voltage		48VDC
Inverter output	Rated power	8.0KW
	Surge rating(20ms)	24KW
	Capable of starting electric motor	4HP
	Waveform	Pure sine wave / same as input (bypass mode)
	Nominal output voltage RMS	240V / 120V
	Output frequency	50Hz \ 60Hz ± 0.3Hz
	Inverter efficiency (peak)	>88%
	Line mode efficiency	>95%
	Power factor	1.0
	Typical transfer time	20ms(max)
AC INPUT	Voltage	220V / 230V / 240V
	Selectable voltage range	90-280 VAC (APL)
	Frequency range	50Hz \ 60Hz
BATTERY	Battery material	Lithium Iron Phosphate
	Battery type	26650 cylinder cell
	High battery voltage cutoff	58.4VDC
	Low battery voltage cutoff	40VDC
	Idle consumption-search mode	<60W when power saver on
	Capacity	16.5KWh
	Rate Continuous Current	327A
	Max Continuous Current	655A
	Max Charge Current	327A
AC Charger	Output voltage	57.6V
	Charger AC input breaker rating	80A
	Overcharge protection S.D.	62.8VDC
	Maximum charge current	100A
By Pass & Protection	Input voltage waveform	Sine wave (grid or generator)
	Nominal input frequency	50Hz or 60Hz
	Overload protection (SMPS Load)	Circuit breaker
	Output short circuit protection	Circuit breaker
	Bypass breaker rating	63A
	Max bypass current	80Amp
Solar Charger	Maximum PV charge current	100A
	DC voltage	48V
	Maximum PV array power	5000W(10000W for 200A optional)
	MPPT range @ operating voltage(Vdc)	64~147VDC
	Maximum PV array open circuitvoltage	147VDC
	Maximum efficiency	>98%
	Standby power consumption	<2W

OTHERS

Operation temperature range	-10°C to 55°C
Charging temperature	0°C to 45°C
Storage temperature	-15°C to 50°C
Audible noise	60dB MAX
Display	LED+LCD

