

Ultra Inverter/Charger

Pure sine, high surge, automatic voltage regulator and full feature, the Ultra is the state of the art. The heart of your power system!



The Ultra RV CSA certificated low frequency sine wave inverter charger represents highly sophisticated and advanced inverter charger available in 4500W/24Vdc with 70A charger, 3600W/24Vdc with 50A charger, 3000W /12Vdc with 90A charger and 2000W/12Vdc with 50A charger models. The Ultra RV features premium sine wave output with high surge capability and temperature compensated, power factor corrected, multi-stage charging to meet power needs of demanding loads including motor loads. All range of Ultra RV inverter chargers are compatible with optional system remote control panel, automatic generator start and battery temperature sensor. All of models are approved to UL458, CSA requirements.

Product Features

- Designed to operate under harsh environment
- Automatic voltage regulator (AVR) when working in charger mode and line mode.
- DC start & automatic self-diagnostic function
- True sine wave output (THD<3%) to operate sensitive electronic and electrical equipment.
- Automatic Generator start function
- Easy to install & easy to operate & easy to solve
- Low DC voltage supports home and office appliances
- Charge rate selectable from 0%-100%
- High efficiency design.
- 13Vdc battery recovery point, dedicated for renewable energy systems.
- 8 pre-set battery type selector plus De-sulphation for totally flat batteries.
- Power factor corrected multi-stage charger for fast, efficient charging, minimizing charging time.
- 10ms max transfer time between utility and battery, guarantees power continuity.
- 15s delay before transfer when AC resumes, protection for load when used with generator.
- Conformal coated circuit boards for humid environments.
- Battery temperature sensing to enhance battery lifecycle.
- LCD and LED display to indicate the status of the inverter charger
- Surge capacity to start difficult loads like refrigerators or A/C compressors.
- Power save mode to reduce idle consume.

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Your Best Partner for Power

Electrical - Inverter	ULTRA4524A	ULTRA3012A	ULTRA3624A	ULTRA4524A	FULAGDA3548A	FULAGDA4548A	FULAGDA6048A
Continuous output power	2000W	3000W	3600W	4500W	3500W	4500W	6000W
Surge Rating	6000W	9000W	10800W	13500W	10500W	13500W	18000W
Capable of starting electric motor	2HP	3HP	3HP	4HP	3HP	4HP	6HP
Output waveform	Pure sine wave/same as input(bypass mode)						
Nominal efficiency	>88% (peak)						
Line mode efficiency	>95%						
Power factor	0.9-1.0						
Nominal output voltage	100Vac-110Vac-120Vac						120Vac/240Vac
Output voltage regulation	±10% RMS						
Output frequency	50/60Hz±0.3Hz						
Power consumption - inverting (no load)	3.5A _{dc}	4.0A _{dc}	3.0A _{dc}	3.5A _{dc}	2.0A _{dc}	2.0A _{dc}	3.5A _{dc}
Power consumption - searching mode	<1.4A _{dc}	<1.4A _{dc}	<1.6A _{dc}	<1.6A _{dc}	<0.5A _{dc}	<0.5A _{dc}	<1.05A _{dc}
Transfer time	10ms (max)						
Total harmonic distortion (THD)	<3%						
Electrical - DC Input	ULTRA4524A	ULTRA3012A	ULTRA3624A	ULTRA4524A	FULAGDA3548A	FULAGDA4548A	FULAGDA6048A
Nominal input voltage	12.0V _{dc}		24.0V _{dc}		48.0V _{dc}	48.0V _{dc}	48.0V _{dc}
Minimum start voltage	10.5/11.0/11.5 /12.5V _{dc}		21.0/22.0/23.0/25.0V _{dc}		42.0/44.0/46.0/50.0V _{dc}		
Low battery alarm	10.5/11.0/11.5 /12.5V _{dc}		21.0/22.0/23.0/25.0V _{dc}		42.0/44.0/46.0/50.0V _{dc}		
Low battery trip	10.0/10.5/11.0/ 12.0V _{dc}		20.0/21.0/22.0/24.0V _{dc}		40.0/42.0/44.0/48.0V _{dc}		
High voltage alarm & fault	16.0V _{dc}		32.0V _{dc}		64.0V _{dc}		
High DC input recovery	15.5V _{dc}		31.0V _{dc}		62.0V _{dc}		
Low battery voltage recovery	13.0V _{dc}		26.0V _{dc}		52.0V _{dc}		
Electrical - Charger	ULTRA4524A	ULTRA3012A	ULTRA3624A	ULTRA4524A	FULAGDA3548A	FULAGDA4548A	FULAGDA6048A
Input voltage range	Narrow: 100-135Vac; Wide: 90-135Vac						200-254Vac/150-260Vac
Input frequency range	Narrow: 47-55±0.3Hz for 50Hz, 57-65±0.3Hz for 60Hz						
Input frequency range	Wide: 43±0.3Hz plus for 50Hz/60Hz						
Max charge current	50A	90A	50A	70A	25A	30A	55A
Charger efficiency	80%	80%	80%	80%	80%	80%	80%
Over charge current shutdown	15.7V	15.7V	31.4V	31.4V	62.8V	62.8V	62.8V
Output voltage	Depends on battery type *for 12V (+2 for 24V)						
Battery Type				*Absorption mode (V _{dc})		*Float mode (V _{dc})	
Gel U.S.A				14		13.7	
A.G.M 1				14.1		13.4	
A.G.M 2				14.6		13.7	
Sealed lead acid				14.4		13.6	
Gel Euro				14.4		13.8	
Open lead acid				14.8		13.3	
Calcium				15.1		13.6	
De-sulphation	15.5 for 4hrs (12v model)			31 for 4hrs (24v model)		62 for 4hrs (48v model)	

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Electrical - Bypass & protection	ULTRA4524A	ULTRA3012A	ULTRA3624A	ULTRA4524A	FULAGDA3548A	FULAGDA4548A	FULAGDA6048A
Input voltage waveform	Sine wave (grid or generator)						
Nominal voltage	120Vac			240Vac			
Low voltage trip (Wide/Narrow)	78V/92V±4%			140V/190V±4%			
Low voltage re-engage (Wide/Narrow)	83V/97V±4%			150V/200V±4%			
High voltage trip	140V±4%			270V/264V±4%			
High voltage re-engage	135V±4%			260V/254V±4%			
Max AC input voltage	150Vac			300Vac			
Nominal input frequency	50Hz or 60Hz (auto detect)						
Low frequency trip	Narrow: 47±0.3Hz for 50Hz, 57±0.3Hz for 60Hz						
Low frequency trip	Wide: 40±0.3Hz for 50Hz/60Hz						
Low frequency re-engage	Narrow: 48±0.3Hz for 50Hz, 58±0.3Hz for 60Hz						
Low frequency re-engage	Wide: 45±0.3Hz for 50Hz/60Hz						
High frequency trip	Narrow: 55±0.3Hz for 50Hz, 65±0.3Hz for 60Hz						
High frequency trip	Wide: 70±0.3Hz for 50Hz/60Hz						
High frequency re-engage	Narrow: 54±0.3Hz for 50Hz, 64±0.3Hz for 60Hz						
High frequency re-engage	Wide: 65±0.3Hz for 50Hz/60Hz						
Output short circuit protection	Breaker	Breaker	Breaker	Breaker	Breaker	Breaker	Breaker
Electrical - General	ULTRA4524A	ULTRA3012A	ULTRA3624A	ULTRA4524A	FULAGDA3548A	FULAGDA4548A	FULAGDA6048A
Mounting method	Versatile mounting						
Display	LCD+LED status display						
Warranty	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years	2 Years
Automatic Generator Start (AGS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Battery temperature sensor	Option	Option	Option	Option	Option	Option	Option
Remote control panel	Option	Option	Option	Option	Option	Option	Option
Regulatory and environment compliance	ETL & c-ETL certificated to CSA 107.1, UL1741						
Inverter dimensions (L*W*H)	540mm*360mm*190mm (including AC conver and flange)						
Inverter weight (kg)	23	26.5	25.5	31.5	26.5	28.5	31.5
Shipping dimensions (L*W*H)	580mm*450mm*285mm						
Shipping weight (kg)	28	31.5	30.5	36.5	29	31	36.5
Working temperature	0-40C°	0-40C°	0-40C°	0-40C°	0-40C°	0-40C°	0-40C°
Storage temperature	0-70C°	0-70C°	0-70C°	0-70C°	0-70C°	0-70C°	0-70C°