CLEVER NET

IR SERIES
INVERTER 1KW-6KW

Low Frequency Inverter
Pure sine wave combined inverter & charger

IR LED

IR LCD

BATTERY CONNEETION

INPUT/OUTPUT CONNEETION

APPLICABLE

CONNECTOR

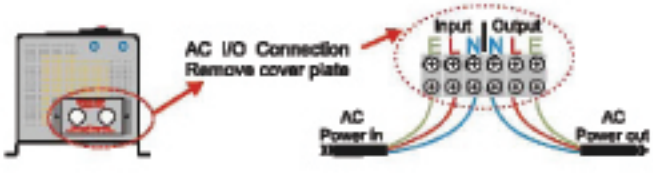
IR SERIES

Features

- Durable construction for long life under extreme environmental conditions
- Low idle current (less than 2 watt) conserves energy when no loads are present
- Soft start capability for starting heavy loads
- Built-in starting control circuits for two- and three-wire generator starting systems
- Better thermal performance allows full output power to 50 C without de-rating
- High surge capacity starts more difficult loads and handles overload conditions reliably
- Durable powder coated, corrosion resistant steel chassis
- 30-70A automatic three-stage battery charger (bulk, absorption, and float) and battery equalization with remote temperature sensor for increased performance

WHAT CABLE TO USE in mm²:

A charger or inverter	cable run distance 0-1.5m	cable run distance 1.5-4.0m
125-160 A	50 mm²	70 mm²
160-330 A	70 mm²	90 mm²



IR SERIES INVERTER
1KW-6KW SPECIFICATION

MODEL	HV MODEL									
IR	1012E	1024E	1512E	2012E	2024E	2524E	3024E	4048E	5048E	6048E
LINE MODE SPECIFICATIONS										
Input Voltage Waveform	Sinusoidal (utility or generator)									
Nominal Input Voltage	110Vac / 120Vac / 220Vac / 230Vac									
Low Line Disconnect	96Vac± 4% / 155Vac± 2%									
Low Line Re-connect	100Vac± 8% / 164Vac± 2%									
High Line Disconnect	132Vac± 4% / 272Vac± 2%									
High Line Re-connect	127Vac± 4% / 265Vac± 2%									
Max AC Input Voltage	270Vrms									
Nominal Input Frequency	50Hz/ 60Hz(Auto detection)									
Low Line Frequency Re-connect	58+0.3Hz for 60Hz;48+0.3Hz for 50Hz;									
Low Line Frequency Disconnect	57+0.3Hz for 60Hz;47+0.3Hz for 50Hz;									
High Line Frequency Re-connect	64+0.3Hz for 60Hz;54+0.3Hz for 50Hz;									
High Line Frequency Disconnect	65+0.3Hz for 60Hz;55+0.3Hz for 50Hz;									
Output Voltage Waveform	As same as Input Waveform									
Over-Load Protection(SMPSload)	Circuit breaker									
Output Short Circuit Protection	Circuit breaker									
Efficiency (Line Mode)	>95%									
Transfer Switch Rating	30A									
Transfer Time (Ac to Dc)	10ms (typical)									
Transfer Time (Dc to Ac)	10ms (typical)									
Pass Through Without Battery	Yes									
Max Bypass Overload Current	30A						30A			
INVERT MODE SPECIFICATIONS										
Output Voltage Waveform	Sine wave									
Rated Output Power (VA)	1000		1500	1500	2000	2500	3000	4000	5000	6000
Rated Output Power (W)	1000		1500	1500	2000	2500	3000	4000	5000	6000
Power Factor	0~1.0									
Nominal Output Voltage (V)	120V/230Vac									
Nominal Output Frequency (Hz)	50Hz ± 0.3Hz									
Auto Tracking Main Frequency(Hz)	Yes (Following Main first connection)50Hz @48-54Hz ;60Hz @58-64Hz									
Output Voltage Regulation	± 10% rms									
Nominal Efficiency	>80%									
Over-Load Protection(SMPS load)	(110%<load<125%) ± 10%: Fault (shutdown output) after 15 minutes;(125%<load<150%) ± 10%: Fault (shutdown output) after 60s;Load>150% ± 10%:Fault (shutdown output) after 20s;									
Surge Rating (10s)	3000VA		6000VA			7500VA	9000VA	12000VA	15000 VA	18000VA
Capable Of Starting Electric Motor	1 HP		1 HP			1.5HP	2 HP		3 HP	
Output Short Circuit Protection	Current limit (Fault after 10s)									
Inverter Breaker Size	10A		30A							
Nominal DC Input Voltage	12V	24V	12V	24V	24V		48V		48V	
Min DC Start Voltage	10V/20V/40V									
Low Battery Alarm	10.5Vdc ± 0.3Vdc for 12V battery;21.0Vdc ± 0.6Vdc for 24V battery;42.0Vdc ± 0.6Vdc for 48V battery									
Low DC Input Shut-Down	10.0Vdc ± 0.3Vdc for 12V battery;20.0vdc± 0.6Vdc for 24V battery;40.0Vdc± 0.6Vdc for 48V battery									
High DC Input Alarm & Fault	16Vdc ± 0.3Vdc for 12V battery;32Vdc ± 0.6Vdc for 24V battery; 64Vdc ± 0.6Vdc for 48V battery									
High DC Input Recovery	15.5Vdc ± 0.3Vdc for 12V battery;31.0Vdc ± 0.6Vdc for 24V battery; 62.0Vdc ± 0.6Vdc for 48V battery									
Power Saver	Load ≤ 25W (Enabled on " P/S auto" setting of Remote control)									
CHARGE MODE SPECIFICATIONS										
Nominal Input Voltage	120V/230Vac									
Input Voltage Range	196~243Vac									
Nominal Output Voltage	According to the battery type									
Nominal Charge Current	35A	35A	45A	65A	35A	40A	45A	35A	40A	50A
Charge Current Regulation	± 5Adc									
Battery Initial Voltage	0 – 15.7 Vdc/31.4Vdc/62.8Vdc (can operate with 0V battery)									
Charger Short Circuit Protection	Circuit breaker									
Over Charge Protection	Bat. V ≥ 15.7Vdc/31.4Vdc/62.8Vdc,beeps 0.5s every 1s & fault after 60s									
GENERAL SPECIFICATIONS										
Safety Certification	CE									
Safety Certification	FCC									
Operating Temperature Range	0° C to 40° C									
Storage Temperature	15° C below zero to 60° C									
Operation Humidity	5% to 95%									
Audible Noise	60dB max									
Cooling	Forced air, variable speed fan									
Size	1012E/1024E/2012E/2024E/2048E/2524E/3012E/3024E/3048E:461X217X179MM4048E/5048E//6048E:636X217X179MM									

* Product specifications are subject to change without further notice.

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