

All-in-one solar charge inverter

HF4840S80-145/HF4850S80-145



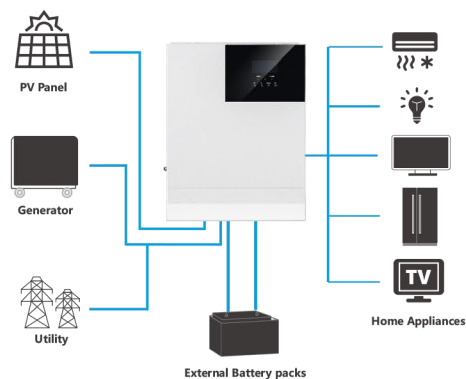
Performance characteristics

- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
- Two output modes: mains bypass and inverter output; uninterrupted power supply.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology with an efficiency of 99.9%.
- With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.
- ON/OFF rocker switch for AC output control.
- Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan to efficiently dissipate heat and extend system life.
- Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
- 360° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.
- Supply of a variety of user-friendly communication modules, such as RS485 (GPRS, WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.

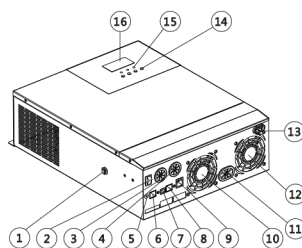
Application scenarios



Product connection diagram



Product characteristics



| | | | |
|---|----------------------------|---|------------------|
| ① | Overload protector | ⑩ | Dry contact port |
| ② | ON/OFF rocker switch | ⑪ | Cooling fan |
| ③ | AC input port | ⑫ | Battery port |
| ④ | AC output port | ⑬ | Cooling fan |
| ⑤ | Grounding screw hold | ⑭ | PV port |
| ⑥ | RS485-2 communication port | ⑮ | Touch button |
| ⑦ | USB communication port | ⑯ | Indicator |
| ⑧ | RS485-1 communication port | ⑰ | LCD screen |

Parameters

| Models | HF4840S80-145 | HF4850S80-145 |
|--|--|---------------|
| AC mode | | |
| Rated input voltage | 220/230Vac | |
| Input voltage range | (170Vac~280Vac) ±2%/(90Vac~280Vac)±2% | |
| Frequency | 50Hz/ 60Hz (Auto detection) | |
| Frequency Range | 47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz); | |
| Overload/short circuit protection | Circuit breaker | |
| Efficiency | >95% | |
| Conversion time (bypass and inverter) | 10ms (typical) | |
| AC reverse protection | Available | |
| Maximum bypass overload current | 40A | |
| Inverter mode | | |
| Output voltage waveform | Pure sine wave | |
| Rated output power (VA) | 4000 | 5000 |
| Rated output power (W) | 4000 | 5000 |
| Power factor | 1 | |
| Rated output voltage (Vac) | 230Vac | |
| Output voltage error | ±5% | |
| Output frequency range (Hz) | 50Hz ± 0.3Hz/60Hz ± 0.3Hz | |
| Maximum Efficiency | >92% | |
| Overload protection | (102% < load < 125%) ±10%; report error and turn off the output after 5 minutes; (125% < load < 150%) ±10%; report error and turn off the output after 10 seconds; Load > 150% ±10%; report error and turn off the output after 5 seconds; | |
| Peak power | 8000VA | 10000VA |
| Loaded motor capability | 3HP | 4HP |
| Output short circuit protection | Circuit breaker | |
| Bypass breaker specifications | 40A | |
| Rated battery input voltage | 48V (Minimum starting voltage 44V) | |
| Battery voltage range | Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen) | |
| Power saving mode | Load ≤50W | |
| AC charging | | |
| Battery type | Lead acid or Lithium battery | |
| Maximum charge current | 60A | |
| Charge current error | ± 5A/dc | |
| Charge voltage range | 40Vdc~58Vdc | |
| Short circuit protection | Circuit breaker and blown fuse | |
| Circuit breaker specifications | 40A | |
| Overcharge protection | Alarm and turn off charging after 1 minute | |
| PV charging | | |
| Maximum PV open circuit voltage | 145Vdc | |
| PV operating voltage range | 60-145Vdc | |
| MPPT voltage range | 60-115Vdc | |
| Battery voltage range | 40-60Vdc | |
| Maximum output power | 4200W | 4200W |
| PV charging current range (can be set) | 0-80A | 0-80A |
| Charging short circuit protection | Blown fuse | |
| Wiring circuit | Reverse polarity protection | |
| Certified specifications | | |
| Certification | CE(EN62109-1) | |
| EMC certification level | EN61000, C2 | |
| Operating temperature range | -15°C to 55°C | |
| Storage temperature range | -25°C ~ 60°C | |
| Humidity range | 5% to 95% (Conformal coating protection) | |
| Noise | ≤60dB | |
| Heat dissipation | Forced air cooling, variable speed of fan | |
| Communication interface | USB/RS485(WIFI/GPRS)/Dry node control | |
| Size (L*W*D) | 426*322*124mm | |
| Weight (kg) | 10.8 | |

All-in-one solar charge inverter

HF4825U80-145/HF4830U80-145/HF4835U80-145



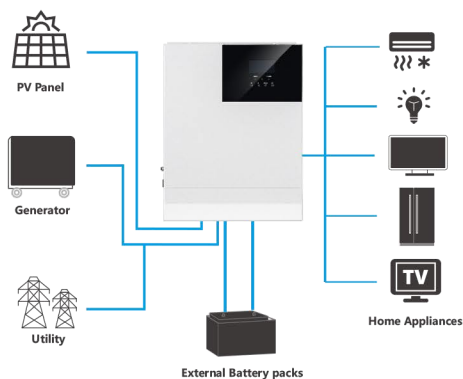
Performance characteristics

- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
- Two output modes: mains bypass and inverter output; uninterrupted power supply.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology with an efficiency of 99.9%.
- With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.
- ON/OFF rocker switch for AC output control.
- Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan to efficiently dissipate heat and extend system life.
- Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
- 360° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.
- Supply of a variety of user-friendly communication modules, such as RS485 (GPRS, WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.

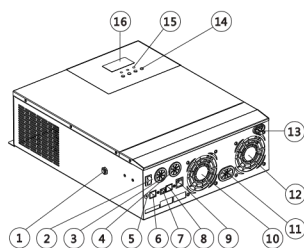
Application scenarios



Product connection diagram



Product characteristics



| | | | |
|---|----------------------------|---|------------------|
| ① | Overload protector | ⑩ | Dry contact port |
| ② | ON/OFF rocker switch | ⑪ | Cooling fan |
| ③ | AC input port | ⑫ | Battery port |
| ④ | AC output port | ⑬ | Cooling fan |
| ⑤ | Grounding screw hold | ⑭ | PV port |
| ⑥ | RS485-2 communication port | ⑮ | Touch button |
| ⑦ | USB communication port | ⑯ | Indicator |
| ⑧ | RS485-1 communication port | ⑰ | LCD screen |

Parameters

| Models | HF4825U80-145 | HF4830U80-145 | HF4835U80-145 |
|--|---------------|--|---------------|
| AC mode | | | |
| Rated input voltage | | 110/120Vac | |
| Input voltage range | | (90Vac~140Vac) ±2% | |
| Frequency | | 50Hz/ 60Hz (Auto detection) | |
| Frequency Range | | 47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz); | |
| Overload/short circuit protection | | Circuit breaker | |
| Efficiency | | >95% | |
| Conversion time (bypass and inverter) | | 10ms (typical) | |
| AC reverse protection | | Available | |
| Maximum bypass overload current | | 40A | |
| Inverter mode | | | |
| Output voltage waveform | | Pure sine wave | |
| Rated output power (VA) | 2500 | 3000 | 3500 |
| Rated output power (W) | 2500 | 3000 | 3500 |
| Power factor | | 1 | |
| Rated output voltage (Vac) | | 120Vac | |
| Output voltage error | | ±5% | |
| Output frequency range (Hz) | | 50Hz ± 0.3Hz/60Hz ± 0.3Hz | |
| Maximum Efficiency | | >91% | |
| Overload protection | | (102% < load < 110%) ±10%: report error and turn off the output after 5 minutes; (110% < load < 125%) ±10%: report error and turn off the output after 10 seconds; (Load > 125% ±10%): report error and turn off the output after 5 seconds; | |
| Peak power | 4000VA | 4500VA | 5000VA |
| Loaded motor capability | 1HP | 2HP | 2HP |
| Output short circuit protection | | Circuit breaker | |
| Bypass breaker specifications | | 40A | |
| Rated battery input voltage | | 48V (Minimum starting voltage 44V) | |
| Battery voltage range | | Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen) | |
| Power saving mode | | Load ≤50W | |
| AC charging | | | |
| Battery type | | Lead acid or lithium battery | |
| Maximum charge current | | 40A | |
| Charge current error | | ± 5A/c | |
| Charge voltage range | | 40Vdc~60Vdc | |
| Short circuit protection | | Circuit breaker and blown fuse | |
| Circuit breaker specifications | | 40A | |
| Overcharge protection | | Alarm and turn off charging after 1 minute | |
| PV charging | | | |
| Maximum PV open circuit voltage | | 145Vdc | |
| PV operating voltage range | | 60-145Vdc | |
| MPPT voltage range | | 60-115Vdc | |
| Battery voltage range | | 40-60Vdc | |
| Maximum output power | 4200W | | 4200W |
| PV charging current range (can be set) | 0-80A | | 0-80A |
| Charging short circuit protection | | Blown fuse | |
| Wiring protection | | Reverse polarity protection | |
| Certified specifications | | | |
| Certification | | CE(EN62109-1) | |
| EMC certification level | | EN61000, C2 | |
| Operating temperature range | | -15°C to 55°C | |
| Storage temperature range | | -25°C ~ 60°C | |
| Humidity range | | 5% to 95% (Conformal coating protection) | |
| Noise | | ≤60dB | |
| Heat dissipation | | Forced air cooling, variable speed of fan | |
| Communication interface | | USB/RS485(WIFI/GPRS)/Dry node control | |
| Size (L*W*D) | | 426*322*124mm | |
| Weight (kg) | | 10.8 | |

All-in-one solar charge inverter

HFP4850S80/HFP4835U80-145



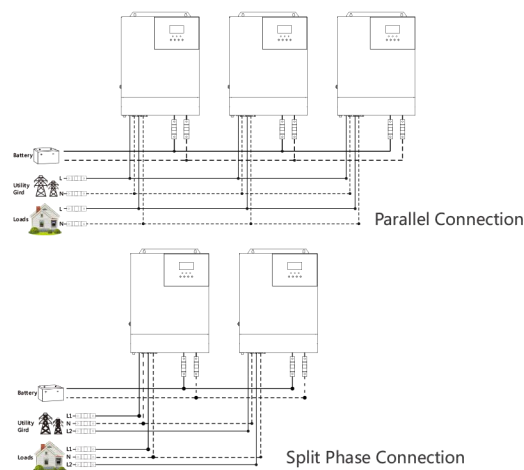
Performance characteristics

- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
- Two output modes: mains bypass and inverter output; uninterrupted power supply.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology with an efficiency of 99.9%.With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.
- ON/OFF rocker switch for AC output control.
- Power saving mode available to reduce no-load loss.-Intelligent variable speed fan to efficiently dissipate heat and extend system life.
- Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
- 360 ° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.
- Supply of a variety of user-friendly communication modules, such as RS485(GPRS, WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.
- Available for 6 units parallel connection.
- Available for split phase connection.

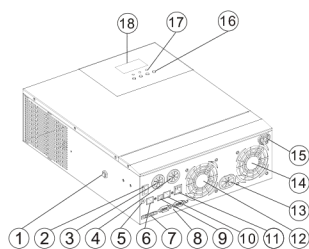
Application scenarios



Product connection diagram



Product characteristics



| | |
|--|------------------------------|
| ① Overload protector | ⑩ RS485-1 communication port |
| ② ON/OFF rocker switch | ⑪ Dry contact port |
| ③ AC input port | ⑫ Cooling fan |
| ④ AC output port | ⑬ Battery port |
| ⑤ Grounding screw hold | ⑭ Cooling fan |
| ⑥ RS485-2 communication port | ⑮ PV PORT |
| ⑦ Current sharing port (parallel module only) | ⑯ Touch the key lightly |
| ⑧ Parallel communication port (parallel module only) | ⑰ Indicator light |
| ⑨ USB communication port | ⑱ LCD screen |

Parameters

| Models | HFP4850S80-145 | HFP4835U80-145 |
|--|--|--|
| AC mode | | |
| Rated input voltage | 220/230Vac | 110/120Vac |
| Input voltage range | (170Vac~280Vac) ±2%/(90Vac-280Vac)±2% | (90Vac~140Vac) ±2% |
| Frequency | 50Hz/ 60Hz(Auto detection) | |
| Parallelable/Split Phase units | Max. parallelable unit: 6pcs | |
| Frequency Range | 47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz); | |
| Overload/short circuit protection | Circuit breaker | |
| Efficiency | >95% | |
| Conversion time (bypass and inverter) | 10ms (typical) | |
| AC reverse protection | Available | |
| Maximum bypass overload current | 40A | |
| Inverter mode | | |
| Output voltage waveform | Pure sine wave | |
| Rated output power (VA) | 5000 | 3500 |
| Rated output power (W) | 5000 | 3500 |
| Power factor | 1 | |
| Rated output voltage (Vac) | 230Vac | 120Vac |
| Output voltage error | ±5% | |
| Output frequency range (Hz) | 50Hz ± 0.3Hz/60Hz ± 0.3Hz | |
| Maximum Efficiency | >92% | >91% |
| Overload protection | (102% < load <125%) ±10%: report error and turn off the output after 5 minutes;(125% < load < 150%) ±10%:report error and turnoff the output after 10 seconds;Load >150% ±10%: report error and turn off the output after 5 seconds; | (102% < load <110%) ±10%: report error and turn off the output after 5 minutes;(110% < load < 125%) ±10%: report error and turn off the output after 10 seconds;(Load >125% ±10%): report error and turn off the output after 5 seconds; |
| Peak power | 10000VA | 6000VA |
| Loaded motor capability | 4HP | 2HP |
| Output short circuit protection | Circuit breaker | |
| Bypass breaker specifications | 40A | |
| Rated battery input voltage | 48V (Minimum starting voltage 44V) | |
| Battery voltage range | Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen) | |
| Power saving mode | Load ≤50W | |
| AC charging | | |
| Battery type | Lead acid or lithium battery | |
| Maximum charge current | 60A | 40A |
| Charge current error | ± 5A _{dc} | |
| Charge voltage range | 40V _{dc} ~58V _{dc} | 40V _{dc} ~60V _{dc} |
| Short circuit protection | Circuit breaker and blown fuse | |
| Circuit breaker specifications | 40A | |
| Overcharge protection | Alarm and turn off charging after 1 minute | |
| PV charging | | |
| Maximum PV open circuit voltage | 145V _{dc} | |
| PV operating voltage range | 60-145V _{dc} | |
| MPPT voltage range | 60-115V _{dc} | |
| Battery voltage range | 40-60V _{dc} | |
| Maximum output power | 4200W | |
| PV charging current range (can be set) | 0-80A | |
| Charging short circuit protection | Blown fuse | |
| Wiring protection | Reverse polarity protection | |
| Certified specifications | | |
| Certification | CE(EN62040-1) | |
| EMC certification level | EN62040-2, C2 | |
| Operating temperature range | -15°C to 55°C | |
| Storage temperature range | -25°C ~ 60°C | |
| Humidity range | 5% to 95% (Conformal coating protection) | |
| Noise | ≤60dB | |
| Heat dissipation | Forced air cooling, variable speed of fan | |
| Communication interface | USB/RS485(WIFI/GPRS)/Dry node control | |
| Size (L*W*D) | 426*322*124mm | |
| Weight (kg) | 10.8 | |

All-in-one solar charge inverter

HF2420S60-100/HF2430S60-100



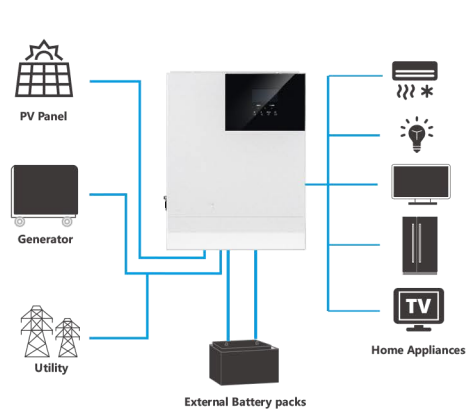
Performance characteristics

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- Two output modes: mains bypass and inverter output; uninterrupted power supply.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology with an efficiency of 99.9%.
- With the charging requirement (voltage, current, mode) settings, and suitable for various types of energy storage batteries.
- ON/OFF rocker switch for AC output control.
- Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan to efficiently dissipate heat and extend system life.
- Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
- 360 ° all-round protection with a number of protection functions. Such as overload, short circuit and over current.
- Supply of a variety of user-friendly communication modules, such as RS485(GPRS,WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.
- Lithium battery can be activated by both mains and PV.

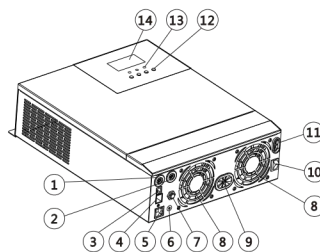
Application scenarios



Product connection diagram



Product characteristics



| | | | |
|---|-----------------------------|---|----------------------|
| ① | AC input port | ⑩ | Cooling fan |
| ② | AC output port | ⑪ | Battery port |
| ③ | USB communication port | ⑫ | ON/OFF rocker switch |
| ④ | RS485 communication port | ⑬ | PV port |
| ⑤ | Dry node port | ⑭ | Touch button |
| ⑥ | Grounding screw hole | ⑮ | LED Indicator |
| ⑦ | AC input Overload protector | ⑯ | LCD screen |

Parameters

| Models | HF2420S60-100 | HF2430S60-100 |
|--|---|---------------|
| AC mode | | |
| Rated input voltage | 220/230Vac | |
| Input voltage range | (170Vac~280Vac) ±2% ; (90Vac~280Vac)±2% | |
| Frequency | 50Hz/ 60Hz (Auto detection) | |
| Frequency Range | 47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz); | |
| Overload/short circuit protection | Circuit breaker | |
| Efficiency | >95% | |
| Conversion time (bypass and inverter) | 10ms (typical) | |
| AC reverse protection | Available | |
| Maximum bypass overload current | 30A | |
| Inverter mode | | |
| Output voltage waveform | Pure sine wave | |
| Rated output power (VA) | 2000 | 3000 |
| Rated output power (W) | 2000 | 3000 |
| Power factor | 1 | |
| Rated output voltage (Vac) | 230Vac | |
| Output voltage error | ±5% | |
| Output frequency range (Hz) | 50Hz ± 0.3Hz/60Hz ± 0.3Hz | |
| Efficiency | >92% | |
| Overload protection | (102% < load <125%) ±10%; report error and turn off the output after 5 minutes; (125% < load < 150%) ± 10%; report error and turn off the output after 10 seconds; Load >150% ±10%; report error and turn off the output after 5 seconds; | |
| Peak power | 4000 | 6000 |
| Loaded motor capability | 1HP | 2HP |
| Output short circuit protection | Circuit breaker | |
| Bypass breaker specifications | 30A | |
| Rated battery input voltage | 24V (Minimum starting voltage 22V) | |
| Battery voltage range | 20.0Vdc~33Vdc (Undervoltage alarm/shutdown voltage/overvoltage alarm/overvoltage recovery... settable on LCD screen) | |
| Power saving mode | Load ≤50W | |
| AC charging | | |
| Battery type | Lead acid or Lithium battery | |
| Maximum charge current | 60A | 80A |
| Charge current error | ± 5Adc | |
| Charge voltage range | 20.0Vdc~33Vdc | |
| Short circuit protection | Circuit breaker and blown fuse | |
| Circuit breaker specifications | 30A | |
| Overcharge protection | Alarm and turn off charging after 1 minute | |
| PV charging | | |
| Maximum PV open circuit voltage | 100Vdc | |
| PV operating voltage range | 30-100Vdc | |
| MPPT voltage range | 30-85Vdc | |
| Battery voltage range | 20-33Vdc | |
| Maximum output power | 1400W | |
| PV charging current range (can be set) | 0-60A | |
| Charging short circuit protection | Blown fuse | |
| Wiring protection | Reverse polarity protection | |
| Certified specifications | | |
| Certification | CE(EN62109-1) | |
| EMC certification level | EN61000, C2 | |
| Operating temperature range | -15°C to 55°C | |
| Storage temperature range | -25°C ~ 60°C | |
| Humidity range | 5% to 95% (Conformal coating protection) | |
| Noise | ≤60dB | |
| Heat dissipation | Forced air cooling, variable speed of fan | |
| Communication interface | USB/RS485(WiFi/GPRS)/Dry node control | |
| Size (L*W*D) | 378*280*103mm | |
| Weight (kg) | 6.2 | |

All-in-one solar charge inverter

HF2420U60-100/HF2430U60-100



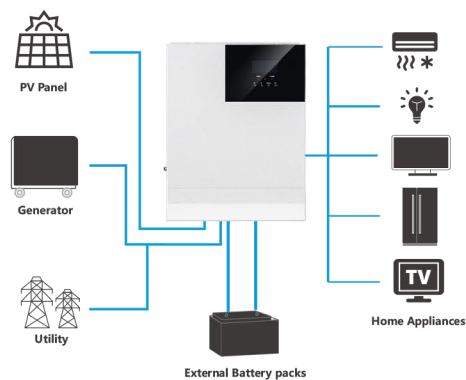
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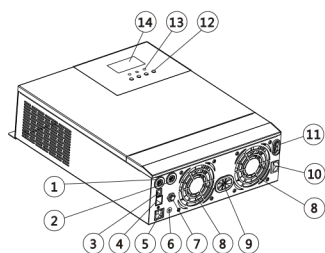
Application scenarios



Product connection diagram



Product characteristics



| | | | |
|---|-----------------------------|---|----------------------|
| ① | AC input port | ⑩ | Cooling fan |
| ② | AC output port | ⑪ | Battery port |
| ③ | USB communication port | ⑫ | ON/OFF rocker switch |
| ④ | RS485 communication port | ⑬ | PV port |
| ⑤ | Dry node port | ⑭ | Touch button |
| ⑥ | Grounding screw hole | ⑮ | LED Indicator |
| ⑦ | AC input Overload protector | ⑯ | LCD screen |

Parameters

| Models | HF2420U60-100 | HF2430U60-100 |
|--|---|---------------|
| AC mode | | |
| Rated input voltage | 110/120Vac | |
| Input voltage range | 90Vac-140Vac±2% | |
| Frequency | 50Hz/ 60Hz (Auto detection) | |
| Frequency Range | 47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz); | |
| Overload/short circuit protection | Circuit breaker | |
| Efficiency | >95% | |
| Conversion time (bypass and inverter) | 10ms (typical) | |
| AC reverse protection | Available | |
| Maximum bypass overload current | 40A | |
| Inverter mode | | |
| Output voltage waveform | Pure sine wave | |
| Rated output power (VA) | 2000 | 3000 |
| Rated output power (W) | 2000 | 3000 |
| Power factor | 1 | |
| Rated output voltage (Vac) | 120Vac | |
| Output voltage error | ±5% | |
| Output frequency range (Hz) | 50Hz ± 0.3Hz/60Hz ± 0.3Hz | |
| Efficiency | >92% | |
| Overload protection | (102% < load < 110%) ±10%; report error and turn off the output after 5 minutes; (110% < load < 125%) ± 10%; report error and turn off the output after 10 seconds; Load > 125% ±10%; report error and turn off the output after 5 seconds; | |
| Peak power | 3000 | 4500 |
| Loaded motor capability | 1HP | 2HP |
| Output short circuit protection | Circuit breaker | |
| Bypass breaker specifications | 40A | |
| Rated battery input voltage | 24V (Minimum starting voltage 22V) | |
| Battery voltage range | 20.0Vdc~33Vdc ± 0.6Vdc (Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen) | |
| Power saving mode | Load ≤50W | |
| AC charging | | |
| Battery type | Lead acid or lithium battery | |
| Maximum charge current | 40A | 40A |
| Charge current error | ± 5A _{dc} | |
| Charge voltage range | 20.0Vdc~33Vdc | |
| Short circuit protection | Circuit breaker and blown fuse | |
| Circuit breaker specifications | 40A | |
| Overcharge protection | Alarm and turn off charging after 1 minute | |
| PV charging | | |
| Maximum PV open circuit voltage | 100Vdc | |
| PV operating voltage range | 30-100Vdc | |
| MPPT voltage range | 30-85Vdc | |
| Battery voltage range | 20-33Vdc | |
| Maximum output power | 1400W | |
| PV charging current range (can be set) | 0-60A | |
| Charging short circuit protection | Blown fuse | |
| Wiring protection | Reverse polarity protection | |
| Certified specifications | | |
| Certification | CE(EN62109-1) | |
| EMC certification level | EN61000, C2 | |
| Operating temperature range | -15°C to 55°C | |
| Storage temperature range | -25°C ~ 60°C | |
| Humidity range | 5% to 95% (Conformal coating protection) | |
| Noise | ≤60dB | |
| Heat dissipation | Forced air cooling, variable speed of fan | |
| Communication interface | USB/RS485(WiFi/GPRS)/Dry node control | |
| Size (L*W*D) | 378*280*103mm | |
| Weight (kg) | 6.8 | |

All-in-one solar charge inverter

HF4830S60-H/HF4850S80-H
HF4835U60-H/HF4850U80-H



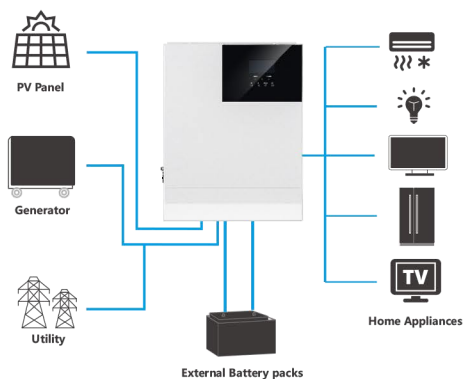
Performance characteristics

- Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave.
- Two output modes: mains bypass and inverter output; uninterrupted power supply.
- Available in 4 charging modes: Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging.
- Advanced MPPT technology with an efficiency of 99.9%.
- With the charging requirement (voltage, current, mode) settings, and suitable for various types of energystorage batteries.
- ON/OFF rocker switch for AC output control.
- Power saving mode available to reduce no-load loss.
- Intelligent variable speed fan to efficiently dissipate heat and extend system life.
- Lithium battery activation design, allowing access of lead-acid battery and lithium battery.
- 360° all-round protection with a number of protection functions. Such as overload, short circuit and overcurrent.
- Supply of a variety of user-friendly communication modules, such as RS485 (GPRS, WiFi), CAN, USB etc., and suitable for computer, mobile phones, Internet monitoring as well as remote operations.

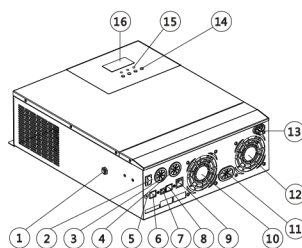
Application scenarios



Product connection diagram



Product characteristics



| | | | |
|---|----------------------------|---|------------------|
| ① | Overload protector | ⑩ | Dry contact port |
| ② | ON/OFF rocker switch | ⑪ | Cooling fan |
| ③ | AC input port | ⑫ | Battery port |
| ④ | AC output port | ⑬ | Cooling fan |
| ⑤ | Grounding screw hold | ⑭ | PV port |
| ⑥ | RS485-2 communication port | ⑮ | Touch button |
| ⑦ | USB communication port | ⑯ | Indicator |
| ⑧ | RS485-1 communication port | ⑰ | LCD screen |

Parameters

| Model | HF4830S60-H | HF4850S80-H | HF4835U60-H | HF4850U80-H |
|---|---|----------------------------|---|----------------------|
| AC mode | | | | |
| Rated input voltage | 220/230Vac | | 110/120Vac | |
| Input voltage range | (170Vac~280Vac) ±2% ; (90Vac~280Vac)±2% | | (90Vac~140Vac)±2% | |
| Frequency | 50Hz/ 60Hz (auto-sensing) | | | |
| Frequency Range | 47±0.3Hz ~ 55±0.3Hz (50Hz)/57±0.3Hz ~ 65±0.3Hz (60Hz); | | | |
| Overload/short circuit protection | Breaker | | | |
| Efficiency | >95% | | | |
| Conversion time (bypass and inverter) | 10ms (Typical value) | | | |
| AC reverse protection | Available | | | |
| Maximum bypass overload current | 40A | | 63A | |
| Inverting mode | | | | |
| Output voltage waveform | Pure sine wave | | | |
| Rated output power(VA) | 3000 (2600/2700/3000) | 5000 (4350/4500/4800/5000) | 3500(2900/3000/3200) | 5000(4100/4300/4500) |
| Rated output power(W) | 3000 (2600/2700/3000) | 5000 (4350/4500/4800/5000) | 3500(2900/3000/3200) | 5000(4100/4300/4500) |
| Power factor | 1 | | | |
| Rated output voltage (Vac) | 230Vac (200/208/220/240Vac settable) | | 120Vac (100/105/110Vac settable) | |
| Output voltage error | ±5% | | | |
| Output frequency range (Hz) | 50Hz ± 0.3Hz/60Hz ± 0.3Hz | | | |
| Efficiency | >90% | | | |
| Overload protection | (102%<-load<125%) ±10%; reporting error and turn off the output after 5 minutes; (125%<-load<150%) ±10%; reporting error and turn off the output after 10 seconds; Load>150% ±10%; reporting error and turn off the output after 5 seconds; | | (102%<-load<110%) ±10%; reporting error and turn off the output after 5 minutes; (110%<-load<125%) ±10%; reporting error and turn off the output after 10 seconds; Load>125% ±10%; reporting error and turn off the output after 5 seconds; | |
| Peak power | 6000VA | 10000VA | 5000VA | 7000VA |
| Loaded motor capacity | 2HP | 4HP | 2HP | 3HP |
| Output short-circuit protection | Breaker | | | |
| Specification of bypass breaker | 40A | | 63A | |
| Rated battery input voltage | 48V (minimum start voltage 44V) | | | |
| Battery voltage range | 40.0Vdc~60Vdc (undervoltage alarm/turnoff voltage/overvoltage alarm/overvoltage restoration...settable LCD screen) | | | |
| Power saving mode | Load ≤50W | | | |
| AC charge | | | | |
| Battery type | Lead acid or lithium battery | | | |
| Maximum charge current | 60A | | 40A | |
| Charge current error | ± 5A dc | | | |
| Charge voltage range | 40Vdc~60Vdc | | | |
| Short-circuit protection | Breaker and blown fuse | | | |
| Breaker specification | 40A | | 63A | |
| Overcharge protection | Turn off charge after 1min alarm | | | |
| Solar charge | | | | |
| Maximum PV open-circuit voltage | 500Vdc | | 450Vdc | 500Vdc |
| PV operation voltage range | 120-500Vdc | | 120-450Vdc | 120-500Vdc |
| MPPT voltage range | 120-450Vdc | | 120-430Vdc | 120-450Vdc |
| Battery voltage range | 40-60Vdc | | | |
| Maximum output power | 4200W | 5000W | 4200W | 5000W |
| Charge current range of solar energy (settable) | 0-60A | 0-80A | 0-60A | 0-80A |
| Charge short-circuit protection | Blown fuse | | | |
| Wiring protection | Inverse wiring protection | | | |
| Authentication specification | | | | |
| Specification authentication | CE(IEC62109), RoHS | | | |
| EMC authentication grade | EN61000 | | | |
| Operation temperature range | -15°C to 55°C | | | |
| Storage temperature range | -25°C ~ 60°C | | | |
| Humidity range | 5% to 95% (Conformal coating protection) | | | |
| Noise | ≤60dB | | | |
| Thermal dissipation | Forced cooling with adjustable air speed | | | |
| Communication interface | USB/RS485 (WiFi/GPRS)/dry node control | | | |
| Dimension (L*W*D) | 426*322*126mm | | | |
| Weight (kg) | 10.9 | | 11.6 | |