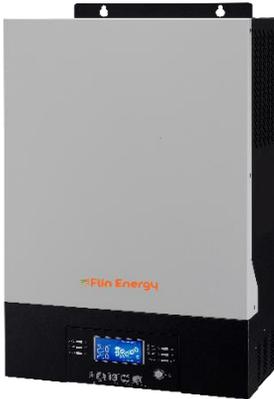




FlinSlim MPPT Ultimate Solar Inverter

Zero Transfer Time | In-Built Energy Meter | Detachable LCD



- ✦ Zero transfer time to protect critical loads.
- ✦ In-built kWh Meter
- ✦ In-built WiFi Monitoring for mobile based monitoring
- ✦ Detachable LCD control module with multiple communication options
- ✦ USB On-the-Go function and RS485 communication port available
- ✦ Configurable AC/Solar Charger priority via LCD setting.

Zero Transfer Time

FlinSlim Ultimate MPPT is designed to power critical loads which require zero transfer time to ensure unobstructed power supply 24*7. The switch time in this system is 0 ms from one mode to another. You will not even realize when a switch happens. This inverter is ideal for sensitive equipment like servers, ATMs and medical machines.

0ms

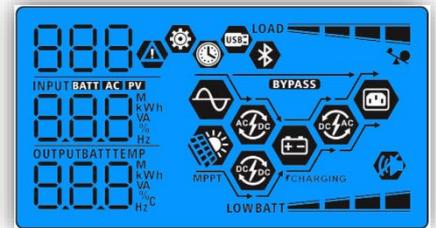


Direct Power from Solar

FlinSlim MPPT Ultimate allows you to choose on how to power your loads. Share loads between solar & battery or power load from utility. The intelligent system allows to power load directly from solar power during the day time keeping grid and/or battery power only for back-up.

Detachable LCD Screen & Comprehensive Display

FlinSlim MPPT Ultimate comes with option to detach the LCD screen from the inverter and install at another location. This helps in ease of viewing particularly if the inverter is installed in a corner of the house. The comprehensive user-friendly LCD display shows operating status and allows you to configure system as per your need. You can set/change battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications from the LCD screen itself.



Battery Equalization

Unique battery equalization feature reverses the build-up of negative chemical effects like stratification, thus helping you maintain and improving the battery life cycle.

In-built WiFi Monitoring

FlinSlim MPPT Ultimate comes with In-built WiFi monitoring. This makes monitoring easy for customer. Using WatchPower app and with inbuilt WiFi, customer has full control on device. Customer can change settings of inverter remotely from anywhere in the world.





- ✦ Pure sine wave inverter
- ✦ Built-in MPPT solar charge controller
- ✦ Parallel option available and can parallel up to 9 units
- ✦ Overload/ Over temperature/ short circuit protection
- ✦ Smart battery charger design for optimized battery performance
- ✦ Compatible to mains voltage or generator power
- ✦ Auto restart while AC is recovering
- ✦ In-built WiFi Monitoring

MODEL	FlinSlim MPPT Ultimate 5kVA-48V
RATED POWER	5000 VA / 5000 W
Parallel Capability	Up to 9 units
INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For UPS Mode) at 100% Load; 90-280 VAC (For Appliance Mode) at 50% Load
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%
Surge Capacity	10000 for 5 seconds
Efficiency (Peak)	94.4% at line mode, 90% at battery mode
Transfer Time	0 ms
Waveform	Pure Sine Wave
BATTERY	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
SOLAR CHARGER	
Maximum PV Array Power	4000W
Solar Charger Type	MPPT
MPPT Range	60 ~ 115 VDC
Maximum PV Array - Open Circuit Voltage	145 VDC
Maximum Solar Charge Current	80 A
Maximum AC charge current	60 A
Maximum Charge Current	140 A
PHYSICAL	
Dimension, D x W x H (mm)	140 x 300 x 512
Net Weight (kgs)	12.2
Communication Interface	USB / RS232 / RS485 / Bluetooth / Dry-contact
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	0°C - 55°C
Storage Temperature	-15°C - 60°C
*Product specifications are subject to change without further notice.	



FlinSlim MPPT Stack Solar Inverter

Zero Transfer Time | In-Built Wi-Fi Monitoring | In-Built kWh Meter



- ✦ Zero transfer time to protect critical loads.
- ✦ Stackable Design
- ✦ Communication port for BMS (RS485, CAN-BUS or RS232)
- ✦ In-Built WiFi monitoring
- ✦ Configurable AC/Solar Charger & Output priority
- ✦ Up to 140A charging capacity for battery

Zero Transfer Time

FlinSlim MPPT Stack is designed to power critical loads which require zero transfer time to ensure unobstructed power supply 24*7. The switch time in this system is 0 ms from one mode to another. You will not even realize when a switch happens. This inverter is ideal for sensitive equipment like servers, ATMs and medical machines.

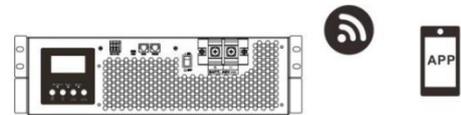


Direct Power from Solar

FlinSlim MPPT Stack allows you to choose on how to power your loads. Share loads between solar & battery or power load from utility. The intelligent system allows to power load directly from solar power during the day time keeping grid and/or battery power only for back-up.

Inbuilt Wi-Fi for Monitoring

FlinSlim MPPT Stack comes with inbuilt Wi-Fi monitoring. This makes monitoring easy for customers. Using WatchPower app and with inbuilt Wi-Fi, customer has full control on device. Customers can change settings of the inverter remotely from anywhere in the world.

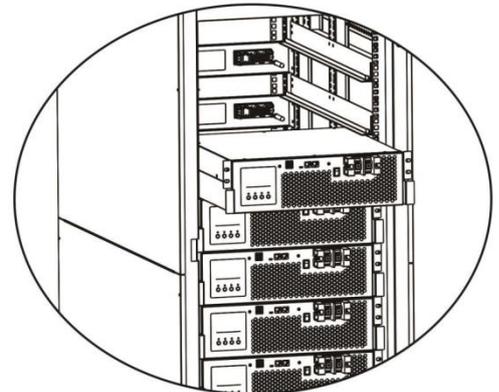


Battery Equalization

Unique battery equalization feature reverses the build-up of negative chemical effects like stratification, thus helping you maintain and improving the battery life cycle.

Stackable Design

FlinSlim MPPT Stack is designed in a way to enable stacking of these inverters with lithium batteries in a compact setup. These stack inverters are designed particularly for applications like caravans, lithium battery-based applications and similar applications.





- ✦ Pure sine wave inverter
- ✦ Built-in MPPT solar charge controller
- ✦ Parallel option available and can parallel up to 9 units
- ✦ Overload/ Over temperature/ short circuit protection
- ✦ Smart battery charger design for optimized battery performance
- ✦ Compatible to mains voltage or generator power
- ✦ Auto restart while AC is recovering
- ✦ Overload/ Over temperature/ short circuit protection

MODEL	FlinSlim MPPT Stack 5kVA-48V
RATED POWER	5000 VA / 5000 W
Parallel Capability	Up to 9 units
INPUT	
Voltage	230 VAC
Selectable Voltage Range	110-280 VAC
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%
Surge Capacity	10000 for 5 seconds
Efficiency (Peak)	93% at line mode, 90% at battery mode
Transfer Time	0 ms
Waveform	Pure Sine Wave
BATTERY	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
SOLAR CHARGER	
Maximum PV Array Power	4000W
Solar Charger Type	MPPT
MPPT Range	60 ~ 115 VDC
Maximum PV Array Open Circuit Voltage	145 VDC
Maximum Solar Charge Current	80 A
Maximum AC charge current	60 A
Maximum Charge Current	140 A
PHYSICAL	
Dimension, D x W x H (mm)	466.3 x 438 x 130.8
Net Weight (kgs)	15
Communication Interface	USB/RS232/RS485/Dry-contact/Wi-Fi
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C - 50°C
Storage Temperature	-15°C - 60°C
*Product specifications are subject to change without further notice.	



FlinSlim MPPT Elite 7.2kVA Solar Inverter

Dual MPPT - 8000W PV Input | Built-in Wi-Fi Monitoring | Built-in Dust Filter



- ✦ Pure Sine Wave solar inverter with up-to 93% peak efficiency
- ✦ Setting Timer available for load priority and battery charging
- ✦ Selectable maximum discharge current based on battery bank
- ✦ Built in Wi-Fi monitoring via mobile app
- ✦ Communication port for BMS - RS485
- ✦ LED bar with RGB Lights to indicate status
- ✦ Compatible with Lead Acid, Lithium-Ion and LiFePO4 Batteries
- ✦ Can be used without batteries
- ✦ Connect up-to 6 inverters in parallel in single phase & three phase

Direct Power from Solar

FlinSlim MPPT Elite allows you to choose on how to power your loads: Either share loads between solar & utility or share loads between solar & battery. Intelligent system allows you to power load directly from solar power during the day time keeping grid and/or battery power only for back-up.

Wide PV input & MPPT range

FlinSlim MPPT Elite comes with high PV input capacity of 8KW. It comes with Dual controllers of 4kW each. Wide MPPT range (90 ~ 430 VDC) of the built-in solar charge controller offers more flexibility to the users to use any size of solar panels and helps reduce installation costs.

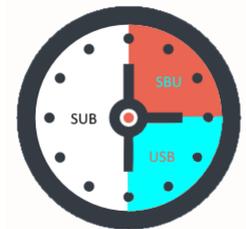
Customizable Display with RGB LED Bar

FlinSlim MPPT Elite is designed to offer great flexibility in user operation. Removable LCD screen & menu buttons allow you to customize more than 30 settings.

RGB LED bar lights-up in different colours to depict the operation mode, energy source, battery capacity and load level. All these parameters can be configured through the LCD panel.

Timer for Load Priority and Battery Charging

FlinSlim MPPT Elite gives you the option to select the mode you wish to run the loads and charge batteries during different times of the day. You get to select the specific hours when you wish the inverter to run in SUB and other modes to power your load or charge batteries and automatically the inverter will do that.



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Specifications of FlinSlim MPPT Elite 7.2kVA Solar Inverter

MODELS	7.2 kVA-48V
RATED POWER	7200 VA / 7200 W
Parallel Capability	Yes, up to 6 units
INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For UPS Mode); 90-280 VAC (For Appliance Mode)
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%
Surge Power (for 5 seconds)	15000 VA
Efficiency (Peak)	93%
Transfer Time	15 ms (For UPS Mode); 20 ms (For Appliance Mode)
Waveform	Pure Sine Wave
No Load Power Consumption	< 50 W
BATTERY & AC CHARGER	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
Maximum Solar Charging Current	80 A
Maximum AC Charging Current	80 A
SOLAR CHARGE CONTROLLER	
Solar Charger Type	MPPT
Maximum PV Array Power	8000 W (2 x 4000W)
Maximum PV Input Current	18A
MPPT Voltage Range	90 ~ 450 VDC
Max PV Open Circuit Voltage	500 VDC
PHYSICAL(9mm)	
Dimension	143 x 420 x 531 mm (D x W x H)
Net Weight	16 kgs
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C - 50°C
Storage Temperature	-15°C - 60°C
*Product specifications are subject to change without further notice	

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FlinSlim MPPT Elite 8kVA Solar Inverter

Dual MPPT - 8000W PV Input | Built-in Wi-Fi Monitoring | Built-in Dust Filter



- ✦ Pure Sine Wave solar inverter with up-to 93% peak efficiency
- ✦ Setting Timer available for load priority and battery charging
- ✦ Selectable maximum discharge current based on battery bank
- ✦ Built in Wi-Fi monitoring via mobile app
- ✦ Communication port for BMS - RS485
- ✦ LED bar with RGB Lights to indicate status
- ✦ Compatible with Lead Acid, Lithium-Ion and LiFePO4 Batteries
- ✦ Can be used without batteries
- ✦ Connect up-to 6 inverters in parallel in single phase & three phase

Direct Power from Solar

FlinSlim MPPT Elite allows you to choose on how to power your loads: Either share loads between solar & utility or share loads between solar & battery. Intelligent system allows you to power load directly from solar power during the day time keeping grid and/or battery power only for back-up.

Wide PV input & MPPT range

FlinSlim MPPT Elite comes with high PV input capacity of 8KW. It comes with Dual controllers of 4kW each. Wide MPPT range (90 ~ 430 VDC) of the built-in solar charge controller offers more flexibility to the users to use any size of solar panels and helps reduce installation costs.

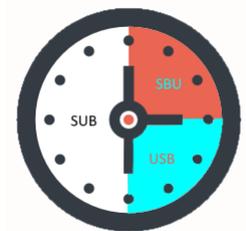
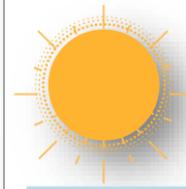
Customizable Display with RGB LED Bar

FlinSlim MPPT Elite is designed to offer great flexibility in user operation. Removable LCD screen & menu buttons allow you to customize more than 30 settings.

RGB LED bar lights-up in different colours to depict the operation mode, energy source, battery capacity and load level. All these parameters can be configured through the LCD panel.

Timer for Load Priority and Battery Charging

FlinSlim MPPT Elite gives you the option to select the mode you wish to run the loads and charge batteries during different times of the day. You get to select the specific hours when you wish the inverter to run in SUB and other modes to power your load or charge batteries and automatically the inverter will do that.





Specifications of FlinSlim MPPT Elite 8kVA Solar Inverter

MODELS	8 kVA-48V
RATED POWER	8000 VA / 8000 W
Parallel Capability	Yes, up to 6 units
INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For UPS Mode); 90-280 VAC (For Appliance Mode)
Frequency Range	50 Hz/60 Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%
Surge Power (for 5 seconds)	15000 VA
Efficiency (Peak)	93%
Transfer Time	15 ms (For UPS Mode); 20 ms (For Appliance Mode)
Waveform	Pure Sine Wave
No Load Power Consumption	< 50 W
BATTERY & AC CHARGER	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
Maximum Solar Charging Current	120 A
Maximum AC Charging Current	120 A
SOLAR CHARGE CONTROLLER	
Solar Charger Type	MPPT
Maximum PV Array Power	8000 W (2 x 4000W)
Maximum PV Input Current	18A x 2
MPPT Voltage Range	90 ~ 450 VDC
Max PV Open Circuit Voltage	500 VDC
PHYSICAL (9mm)	
Dimension	147.4 x 432.5 x 553.6 mm (D x W x H)
Net Weight	18.4 kgs
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C - 50°C
Storage Temperature	-15°C - 60°C
*Product specifications are subject to change without further notice	

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FlinFuzion MPPT Solar Inverter

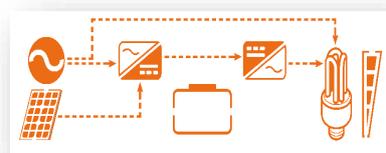
Batteries Optional | In-Built WiFi Monitoring | Wide MPPT Range



- ✦ Pure Sine Wave solar inverter with up-to 93% peak efficiency
- ✦ Built-in wide range MPPT solar charge controller
- ✦ Can operate with or without batteries
- ✦ Load sharing between solar & grid
- ✦ Compatible with lithium ion, LeFePO4 and Lead Acid Batteries
- ✦ In-Built WiFi Monitoring
- ✦ In-Built BMS port to support lithium batteries
- ✦ Light weight with slim design

Use With or Without Batteries

FlinFuzion MPPT is designed to offer great flexibility. If you face power cuts then connect batteries for back up today and in future when you do not face power cuts, you can use the system without batteries.



Direct Power from Solar

FlinFuzion allows you to choose on how to power your loads: Either share loads between solar & utility or share loads between solar & battery. Intelligent system allows you to power load directly from solar power during the day time keeping grid and/or battery power only for back-up.

Wide PV input & MPPT range

FlinFuzion Series comes with high PV input capacity of upto 5000W and wide MPPT range of the built-in solar charge controller offers more flexibility to the users to use any size of solar panels and helps reducing installation costs.



Battery Equalization

Unique battery equalization feature reverses the build-up of negative chemical effects like stratification, thus helping you maintain and improving the battery life cycle.

Comprehensive Display and In-Built WiFi

FlinFuzion is designed to offer great flexibility in user operation. Build-in LCD screen & menu buttons allow you to customize voltage range, charging priority and battery charging current. You can also view operating status and power information on the LCD screen. This model now also has in-built WiFi monitoring and using app you can see all details of your inverter from anywhere at any time.



Specifications of FlinFuzion Solar Inverter

MODELS	3kVA-24V	5kVA-48V
RATED POWER	3000VA/ 3000W	5000VA / 5000W
Parallel Capability	No	
INPUT		
Voltage	230 VAC	
Selectable Voltage Range	170-280 VAC (For UPS Mode); 90-280 VAC (For Appliance Mode)	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%	
Surge Power (for 5 seconds)	6000 VA	10000 VA
Efficiency (Peak)	93%	
Transfer Time	10 ms (For UPS Mode); 20 ms (For Appliance Mode)	
Waveform	Pure Sine Wave	
BATTERY & AC CHARGER		
Battery Voltage	24 VDC	48 VDC
Floating Charge Voltage	27 VDC	54 VDC
Overcharge Protection	33 VDC	63 VDC
Battery Equalization Feature	Yes	
Maximum AC Charge Current	80 A	100 A
SOLAR CHARGER		
Solar Charger Type	MPPT	
Maximum Solar Charging Current	100 A	
Maximum PV Array Power	3000 W	5000 W
Number of MPPT Trackers	1	
MPPT Range @ Operating Voltage	60 ~ 400 VDC	120 ~ 450 VDC
Nominal PV Voltage	240 VDC	
Maximum PV Array Open Circuit Voltage	450 VDC	500 VDC
Monitoring		
Communication Ports	RS232, RS485(For BMS only	
Monitoring Software	In-Built WiFi Monitoring Included	
PHYSICAL		
Dimension, D x W x H (mm)	110 x 288 x 390	120 x 300 x 440
Net Weight (kgs)	7.2	10
Dust Filter	Included	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity (Non-condensing)	
Operating Temperature	-10°C - 50°C	
Storage Temperature	-15°C - 60°C	
*Product specifications are subject to change without further notice		

MULTI-OPERATION MODE



- ✔ Pure Sine Wave solar inverter with up-to 93% peak efficiency
- ✔ 4.3" large coloured LCD Display with touch buttons & customizable LED Ring with RGB lights
- ✔ Setting Timer available for load priority & battery charging
- ✔ Built in Wi-Fi monitoring via mobile app
- ✔ Communication port for BMS - RS485
- ✔ Inbuilt kWh Meter
- ✔ Can be used without batteries & compatible with Lead Acid, Lithium-Ion and LiFePO4 Batteries
- ✔ Connect up-to 9 inverters in parallel in single phase & three phase



Direct Power from Solar

FlinMarvel allows you to choose on how to power your loads: Either share loads between solar & utility or share loads between solar & battery. Intelligent system allows you to power load directly from solar power during the day time keeping grid and/or battery power only for back-up. Wide MPPT range (120 ~ 430 VDC) of the built-in solar charge controller offers more flexibility to the users and reduces installation costs.

Battery Compatibility



FlinMarvel is next generation ready. It can be used with or without batteries. It is compatible with Lead Acid, Lithium-Ion and LiFePO4 Batteries. With existing BMS port and multiple options available for lithium-ion batteries, you can pick a lithium bank from a wide variety.

Customizable Display with RGB LED Ring



FlinMarvel comes with big 4.3" LCD display with touch buttons. It offers three effects for lighting and multiple settings to custom set the RGB lights as per user. FlinMarvel is designed to offer great flexibility in user operation. The touch buttons on the display allow you to customize more than 30 settings. LED ring lights-up in different colours to depict the operation mode, energy source, battery capacity and load level.

Timer for Load Priority and Battery Charging



FlinMarvel gives you the option to select the mode you wish to run the loads and charge batteries during different times of the day. You get to select the specific hours when you wish the inverter to run in SUB and other modes to power your load or charge batteries and automatically the inverter will do that.

Specifications of FlinMarvel MPPT Solar Inverter



WiFi



RGB Ring



Timer



Modular

MODELS	5.6 kW-48V
RATED POWER	5600 VA / 5600 W
Parallel Capability	Yes, up to 9 units

INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For UPS Mode); 90-280 VAC (For Appliance Mode)
Frequency Range	50 Hz/60 Hz (Auto sensing)

OUTPUT	
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%
Surge Power (for 5 seconds)	11200 VA
Efficiency (Peak)	93%
Transfer Time	10 ms (For UPS Mode); 20 ms (For Appliance Mode)
Waveform	Pure Sine Wave
No Load Power Consumption	< 50 W

BATTERY & AC CHARGER	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
Maximum Solar Charging Current	120 A
Maximum AC Charging Current	120 A

SOLAR CHARGE CONTROLLER	
Solar Charger Type	MPPT
Maximum PV Array Power	6000 W
Maximum PV Input Current	27A
MPPT Voltage Range	120 - 430 VDC
Max PV Open Circuit Voltage	450 VDC

PHYSICAL & COMMUNICATION	
Dimension	140 x 295 x 468 mm (D x W x H)
Net Weight (kgs)	12 kgs
Communication	RS232/Dry-Contact/WiFi

OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C - 50°C
Storage Temperature	-15°C - 60°C

*Product specifications are subject to change without further notice

FlinCube 15kW MPPT Solar Inverter System

0 transfer time | All in One Cube | Single Phase & Three Phase



- ✦ FlinCube can be configured to be used in single phase or three phase on site
- ✦ Up to 180A Grid charging and 240A Solar charging for battery
- ✦ Plug and Play system with all protections prewired
- ✦ Compatible with Lead Acid, LiFePO4 and Lithium Ion Battery
- ✦ Inverters have zero transfer time to protect critical loads.
- ✦ Communication ports – USB, RS232 and RS485 (for BMS)
- ✦ In-Built WiFi monitoring, Inbuilt kWh Meter
- ✦ Inverters have configurable AC/Solar Charger & Output priority

FlinCube: Pre-Wired and Configurable

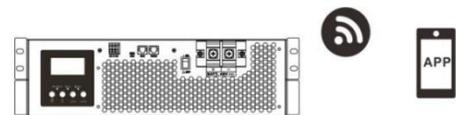
FlinCube is designed using rack mountable powerful FlinSlim MPPT Stack inverters. FlinCube was conceptualized keeping in mind customization requirement that can come onsite. FlinCube can be configured to be used in single phase or three phase on site. FlinCube is prewired with all protections. AC side protections include contactor-based protection for over voltage and under voltage apart from the surge protection devices and MCBs. DC Side comes with surge protection devices and MCBs.

Inbuilt Wi-Fi for Monitoring

FlinCube has FlinSlim MPPT Stack inverters mounted together and these inverters come with inbuilt Wi-Fi monitoring. This makes monitoring easy for customers. Using WatchPower app and with inbuilt Wi-Fi, customer has full control on device. Customers can change settings of the inverter remotely from anywhere in the world.

Zero Transfer Time

FlinSlim MPPT Stack inverters are designed to power critical loads which require zero transfer time to ensure unobstructed power supply 24*7. The switch time in this system is 0 ms from one mode to another. This inverter is ideal for sensitive equipment like servers, ATMs and medical machines.



0ms

Flin Energy



- ✦ Pure sine wave inverters inbuilt with MPPT charge controllers
- ✦ Parallel option available and can parallel up to 3 cubes
- ✦ Overload/ Over temperature/ short circuit protection
- ✦ Smart battery charger design for optimized battery performance
- ✦ Compatible to mains voltage or generator power
- ✦ Auto restart while AC is recovering
- ✦ Overload/ Over temperature/ short circuit protection
- ✦ Compatible with LiFePO4, Lithium Ion and Lead Acid Batteries

MODEL			FlinCube 15kW-48V Solar Inverter System		
	In Single Phase		In Three Phase		
RATED POWER	15kVA / 15kW		5kVA / 5kW per phase		
Parallel Capability	Up to Three FlinCubes				
INPUT					
Voltage	230 VAC		3 x 230 VAC		
Selectable Voltage Range	110-280 VAC				
Frequency Range	50 Hz/60 Hz (Auto sensing)				
OUTPUT					
AC Voltage Regulation (Batt. Mode)	230 VAC ± 5%		3 x 230 VAC ± 5%		
Surge Capacity	10000 for 5 seconds		3 x 10000 for 5 seconds		
Efficiency (Peak)	93% at line mode, 90% at battery mode				
Transfer Time	0 ms				
Waveform	Pure Sine Wave				
BATTERY					
Battery Voltage	48 VDC				
Floating Charge Voltage	54 VDC				
Overcharge Protection	66 VDC				
SOLAR CHARGER					
Maximum PV Array Power	12000W (3 x 4000W)				
Solar Charger Type	MPPT				
MPPT Range	60 ~ 115 VDC				
Maximum PV Array Open Circuit Voltage	145 VDC				
Maximum Solar Charge Current	240A (3 x 80A)				
Maximum AC charge current	180A (3 x 60A)				
Maximum Charge Current	420A (3 x 140A)				
PHYSICAL					
Dimension, D x W x H (m)	0.76 x 0.60 x 1.11				
Net Weight (kgs)	110				
Communication Interface	USB/RS232/RS485/Dry-contact/Wi-Fi				
OPERATING ENVIRONMENT					
Humidity	5% to 95% Relative Humidity (Non-condensing)				
Operating Temperature	-10°C - 50°C				
Storage Temperature	-15°C - 60°C				
*Product specifications are subject to change without further notice.					

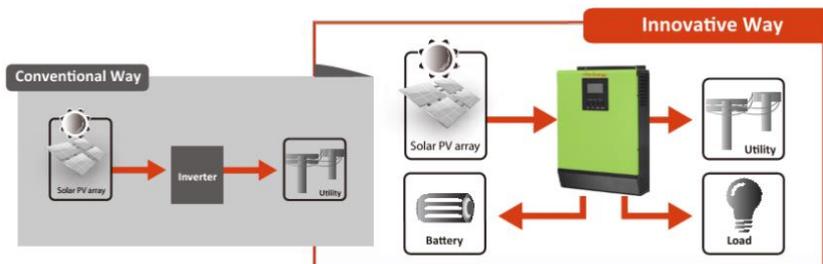
FlinInfini Lite Solar Hybrid Inverter On-grid Hybrid Inverter with Energy Storage



- **Low Solar Panel Setup Cost:** With the MPPT operating range, setup the solar panel with less cost at initial stage and expand easily in future
- **Flexibility of Solar Panel selection:** With the isolated solar input design, FlinInfini Lite is available for all kinds of solar panels.
- **Very Powerful High Charging Current:** FlinInfini Lite model is built in with 60A AC charger and 80A solar charger
- **High DC-AC Conversion Efficiency:** 93% of DC-AC conversion efficiency helps to maximize power availability for connected load with minimize energy loss.

■ Feed-in to Grid + Load + Battery Charging

With enough solar power, FlinInfini Lite converts the solar power to power the load and charge the battery. The extra power will feed-in to the Grid.



■ Pay Less Electricity Bill

FlinInfini Lite uses solar power to power the load directly. If solar power is not enough, it will use the battery energy to power the load. Only if both solar power is low and battery voltage is low, it will draw power from the Grid



■ Battery Backup when AC Fail

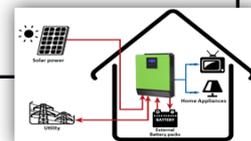
If the Grid is not available, FlinInfini Lite will power the load directly from the solar power and the extra solar energy would be used to charge the battery.



FlinInfini Lite : On-Grid Inverter with Energy Storage



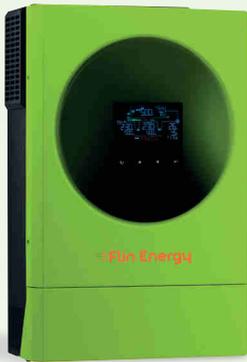
- Pure sine wave output
- Self-consumption and Feed-in to the grid
- Customizable supply priority for PV, Battery or Grid
- User-adjustable charging current and voltage
- Multiple opérations : Grid-tie, off-grid and grid-tie with backup
- Monitoring software for real-time status display and control
- Parallel operation up to 6 units is available for 3K/4K/5K



SPECIFICATIONS OF FLININFINI LITE MODEL

MODEL	4kW-48V
Max. PV Array Power	4000W
Rated Output Power	4000W
Maximum PV Array Open Circuit Voltage	145 VDC
MPPT Range @ Operating Voltage	60 VDC ~ 115 VDC
Number	1
GRID-TIE OPERATION	
GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC
Nominal Output Current	17.4A
Power Factor	> 0.99
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	90%
OFF-GRID, HYBRID OPERATION	
GRID INPUT	
AC Start-up Voltage / Auto Restart Voltage	120-140 VAC / 180 VAC
Acceptable Input Voltage Range	170 -280 VAC
Maximum AC Input Current	40A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	202/208/220/230/240 VAC
Output Waveform	Pure sine wave
Efficiency (DC to AC)	93%
BATTERY & CHARGER	
Nominal DC Voltage	48 VDC
Maximum Solar Charge Current	80 A
Maximum AC Charge Current	60 A
Maximum Charge Current	140 A
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	120 x 295 x 468
Net Weight (kgs)	11
INTERFACE	
Parallel Function	Yes
External Safety Box (Optional)	Yes
Communication	USB/Dry Contact
ENVIRONMENT	
Humidity	0 ~ 90% RH (No condensing)
Operating Temperature	0 to 50°C

Product specifications are subject to change without further notice



MULTI-OPERATION MODE

- ✔ Pure Sine Wave solar inverter with up-to 93% peak efficiency
- ✔ Dual Output for Load
- ✔ 4.3" large coloured LCD Display with touch buttons
- ✔ Inbuilt kWh Meter and Grid Feed-in/Export option
- ✔ Selectable timer for grid charging
- ✔ Customizable supply priority and customer adjustable charging current and voltage
- ✔ Communication port for BMS - RS485
- ✔ Can be used without batteries & compatible with Lead Acid, Lithium-Ion and LiFePO4 Batteries
- ✔ Connect up-to 9 inverters in parallel in single phase & three phase



Direct Power from Solar

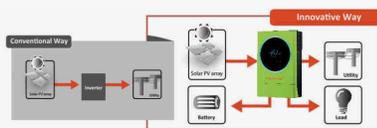
The FlinInfini Turbo system offers versatility in powering your loads by giving you the option to either utilize both solar and utility power or solar and battery power. Its intelligent design lets you directly use solar energy during the daytime and reserve grid or battery power for backup purposes. The system's built-in solar charge controller features a wide MPPT range of 120-430 VDC, providing more options for users and reducing installation expenses.



Dual Output for Load

By connecting emergency loads to one output and non-emergency loads to another, you can control the use of battery backup for non-emergency loads. There are three control options available: schedule a specific time range for switching on, set a battery discharge timer, or establish a voltage limit to switch off the non-emergency load when the battery is discharged. For lithium batteries that allow communication with the inverter, you can set a limit based on the battery's percentage instead of voltage.

Net Metering Feature



Feed-in to Grid + Load + Battery Charging

FlinInfini Turbo converts the solar power generated to power the load and charge the batteries. All excess power generated will feed-in to the Grid if net metering is activated.



Battery Backup when AC Fail

If the Grid is not available, FlinInfini Turbo will continue to power the load directly from the solar power and the extra solar energy generated is used to charge the batteries.

Battery Compatibility



FlinInfini Turbo is next generation ready. It can be used with or without batteries. It is compatible with Lead Acid, Lithium-Ion and LiFePO4 Batteries. With existing BMS port and multiple options available for lithium-ion batteries, you can pick a lithium bank from a wide variety.

Customizable Display with RGB LED Ring



FlinInfini Turbo comes with big 4.3" LCD Display with touch buttons. It offers three effects for the lighting and multiple settings to custom set the RGB lights as per user. It is designed to offer great flexibility in user operation. The touch buttons on the display allow you to customize more than 30 settings. LED ring lights-up in different colours to depict the operation mode, energy source, battery capacity and load level.

Specifications of FlinInfini Turbo Solar Hybrid Inverter



WiFi



RGB Ring



Wide 4.3inch Display



Modular



Dual Output for Load

MODELS	6kW-48V
RATED POWER	6000VA / 6000W
Parallel Capability	Yes, up to 9 units

INPUT	
Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For UPS Mode); 90-280 VAC (For Appliance Mode)
Frequency Range	50 Hz/60 Hz (Auto sensing)

OUTPUT	
Dual Output for Load	Yes
AC Voltage Regulation (Batt. Mode)	230 VAC \pm 5%
Surge Power (for 5 seconds)	12000 VA
Efficiency (Peak)	93%
Transfer Time	10 ms (For UPS Mode); 20 ms (For Appliance Mode)
Waveform	Pure Sine Wave
No Load Power Consumption	< 50 W

BATTERY & AC CHARGER	
Battery Voltage	48 VDC
Floating Charge Voltage	54 VDC
Overcharge Protection	66 VDC
Maximum Solar Charging Current	120 A
Maximum AC Charging Current	120 A

SOLAR CHARGE CONTROLLER	
Solar Charger Type	MPPT
Maximum PV Array Power	6500 W
Maximum PV Input Current	27A
MPPT Voltage Range	120 ~ 430 VDC
Max PV Open Circuit Voltage	500 VDC

PHYSICAL & COMMUNICATION	
Dimension (D x W x H) mm	140 x 295 x 468
Net Weight (kgs)	12 kgs
Communication	RS232/Dry-Contact/WiFi

OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity (Non-condensing)
Operating Temperature	-10°C - 50°C
Storage Temperature	-15°C - 60°C

*Product specifications are subject to change without further notice

FlinInfini 15kW-48V Solar Hybrid Inverter

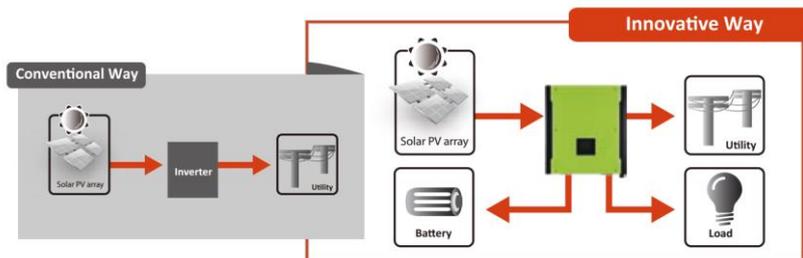
On-grid Hybrid Inverter with Energy Storage



- Pure sinewave output
- Microprocessor controlled to guarantee stable charging system
- Multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in MPPT solar charger
- LCD Display panel for comprehensive information
- Multiple communication for USB, RS-232, Modbus and SNMP
- User-adjustable battery charging current up to 300A
- Parallel up to 6 inverters to make 90kW

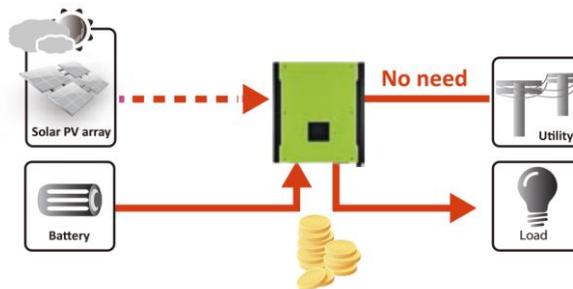
■ Feed-in is not the only choice

In comparison with conventional solar grid-tie inverter, FlinInfini is able to not only feed-in power to grid but also store power to battery for future usage and directly power to the load.



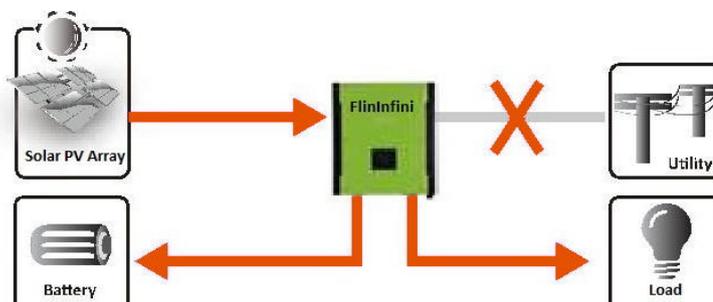
■ Save money by discharging battery for self-consumption first

FlinInfini can save money by using battery power first when PV energy is low. If battery voltage is low, FlinInfini will extract AC power from grid.



■ Power Backup when AC Fails

FlinInfini can also work as on off-grid inverter to provide continuous power even when there is no power from grid. It is a solution for you if you would like to fee-in but also have power during power cuts.



FlinInfini On-Grid Inverter with Energy Storage



- Self-consumption and Feed-in to the grid
- Programmable supply for priority for PV, Grid or Battery
- User-adjustable charging current up to 300A
- Programmable multiple operations mode: Off grid, Grid-tie and grid-tie with backup
- Built-in timer for various modes of on/off operation
- Multiple communication for USB, RS-232, Modbus and SNMP
- Monitoring software for real time status display and control
- Parallel up to 6 inverters

MODEL		15KW-48V
Phase	3 Phase In, 3 Phase Out	
Rated Output Power	15000 W	
Maximum Charging Power	15000 W	
PV INPUT (DC)		
Maximum DC Power	22500 W	
Nominal DC Voltage	720 VDC	
Maximum DC Voltage	900 VDC	
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	
MPP Voltage Range	400 VDC ~ 800 VDC	
Number of MPP Trackers	2	
Maximum Input Current	37.76A & 18.6A	
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Frequency	50 Hz / 60 Hz (auto sensing)	
Output Waveform	Pure Sinewave	
Efficiency (DC to AC)	91%	
GRID-TIE OPERATION		
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 264.5 VAC per phase	
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	
Nominal Output Current	21.7 A per phase	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	> 96%	
European Efficiency @ Vnominal	> 95%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/ Auto Restart Voltage	120 - 140 VAC per phase/ 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40 A	
HYBRID OPERATION		
GRID/UTILITY OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 264.5 VAC per phase	
Output Frequency Range	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz	
Nominal Output Current	14.5 A per phase	
AC INPUT		
AC Start-up Voltage/ Auto Restart Voltage	120 - 140 VAC per phase/ 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40 A	
BATTERY & CHARGER		
Nominal Battery Voltage	48 VDC	
Maximum Charging Current	Default 60 A, 5A - 300 A (adjustable)	
GENERAL		
PHYSICAL		
Dimension, D X W X H (mm)	820 x 650 x 219	
Net Weight (kgs)	62	
INTERFACE		
Communication Port	RS-232/USB and CAN interface	
Intelligent Slot	Optional SNMP, Modbus, and AS-400 cards available	
ENVIRONMENT		
Humidity	0 ~ 90% RH (No condensing)	
Operating Temperature	-10°C to 55°C	
Altitude	0 ~ 1000 m**	

** Power derating 1% every 100m when altitude is over 1000m.

Product specifications are subject to change without further notice



FlinFlow Solar Pump Inverter

High Efficiency | Customizable | In-Built MPPT Solar Charger



- ✦ Built-in high efficiency MPPT solar charge controller with VFD
- ✦ Supports single phase or three-phase asynchronous motor
- ✦ Built-in full protection and self-diagnosis
- ✦ Soft start function prevents water hammer effect & extends system lifecycle.
- ✦ Built-in LEDs and display screen for real-time system status and updates
- ✦ RS-485 communication port available
- ✦ Suitable for up to 20HP AC Pumps

Solar Enabled

FlinFlow solar pump inverter is environment friendly with a long lifetime and low maintenance costs. It comes with built in MPPT charger to ensure that you get the best output. It optimizes the performance of pump solar Inverter along the day. It starts and stops automatically based on the intensity of solar radiation



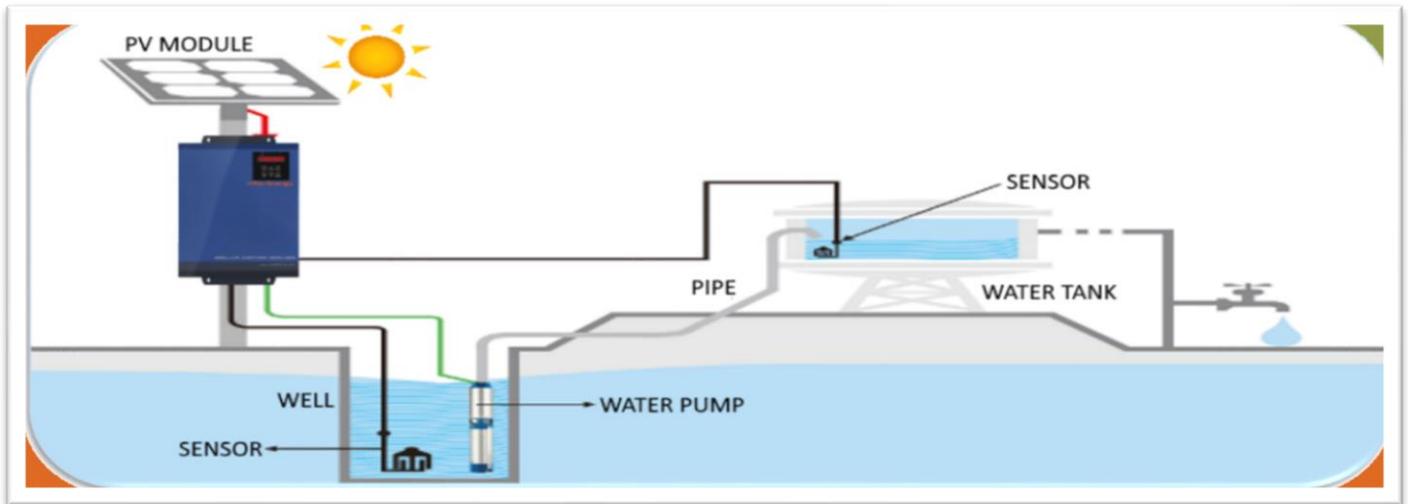
Light Weight

FlinFlow Solar Pump Inverters are super lightweight pump inverters. They weigh only 6kg. They are aesthetically beautiful and easy to install.

Comprehensive Display

FlinFlow solar pump inverters are designed to offer great flexibility in user operation. Inbuilt LCD screen and menu button allow users to customize power factor, voltage, current and DC voltage. You can also view operating status and power information on the LCD screen





SPECIFICATIONS OF FLINFLOW SOLAR PUMP CONTROLLER

MODEL	2.2 kW LS	7.5 kW	11 kW	15 kW
Pump Size Supported	Up to 3HP	Up to 10HP	Up to 15HP	Up to 20HP
Motor Type	Single Phase & Three Phase		Three phase asynchronous motor	
Maximum PV Array	3500 W	12000 W	17600 W	24000 W
Rated Output Power	2200 W	7500 W	11000 W	15000 W
PV INPUT DC				
Nominal DC Voltage	330 VDC		540 VDC	
Maximum DC Voltage	450 VDC		800 VDC	
Start-up Voltage	120 VDC		250 VDC	
MPPT Voltage Range	120 ~ 420 VDC		250 ~ 780 VDC	
OUTPUT				
Nominal Voltage	Single Phase: 220/230/240 VAC Three Phase: 3 x 220/230/240 VAC		380 / 400 / 415 / 440 VAC, Three Phase	
Efficiency	> 97%			
Output Current	14A - Single Phase Asynchronous Motor 10A - Three Phase Motor	15 A	22 A	29 A
Frequency Precision	± 0.2 %			
PROTECTION				
Full Protection	Dry Pumping, Phase Lost, Over-voltage, under-voltage, over-current, surge, over temperature, short circuit protection			
Type of mechanical protection	IP20			
PHYSICAL				
Dimensions D x W x H (mm)	110 x 230 x 342			205 x 218 x 320
Net Weight (kgs)	5	6	6.5	6.5
INTERFACE				
Communication Port	RS-232 / RS-485			
ENVIRONMENT				
Humidity	< 95% RH (condensing)			
Operating Temperature	-20°C to 45°C at 100% load 46°C to 60°C power derating			

Product specifications are subjected to change without further notice

Flin Solar Monitoring System



Wi-Fi module enables wireless communication between Flin Inverters and our monitoring platform. Once you connect the module with inverter using communication cable and install the app for it, you can view the operations of the inverter as well as change any settings or parameters as required through the mobile phone.

✦ Monitor Solar Solutions Anywhere

Check status, performance, manage and monitor your Flin Solar Inverter data remotely anytime through phone app.

✦ Change Settings of inverter

Using the phone app you can easily change the settings of the inverter as required from anywhere.

✦ Prompt Alarm Notification

Get notified immediately on mobile phones in-case of any events such as grid failure etc.

✦ Check historical data through the app

Easily check inverter history data from your phone.

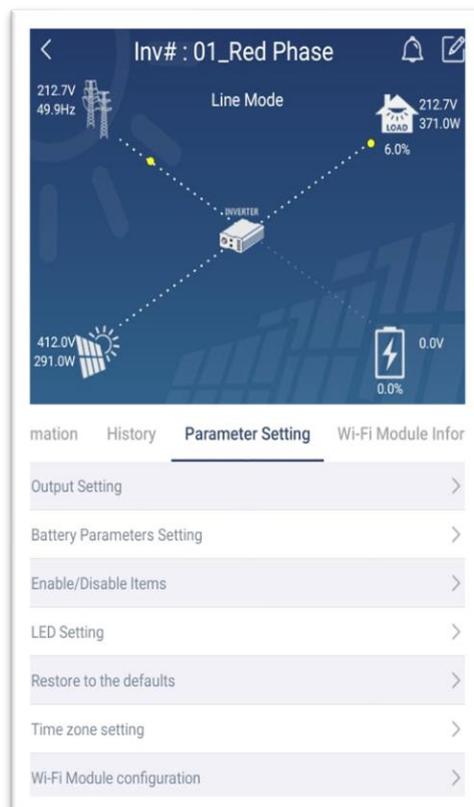
Informational Snapshots

By collecting information from inverters such as status and performance, Flin Solar Monitoring System makes the long-term monitoring of PV systems super-efficient. Using basic information snap shot on your mobile phone, you can quickly & easily track many key parameters such as Battery capacity, PV input power, Output load percent etc.



Parameter Setting

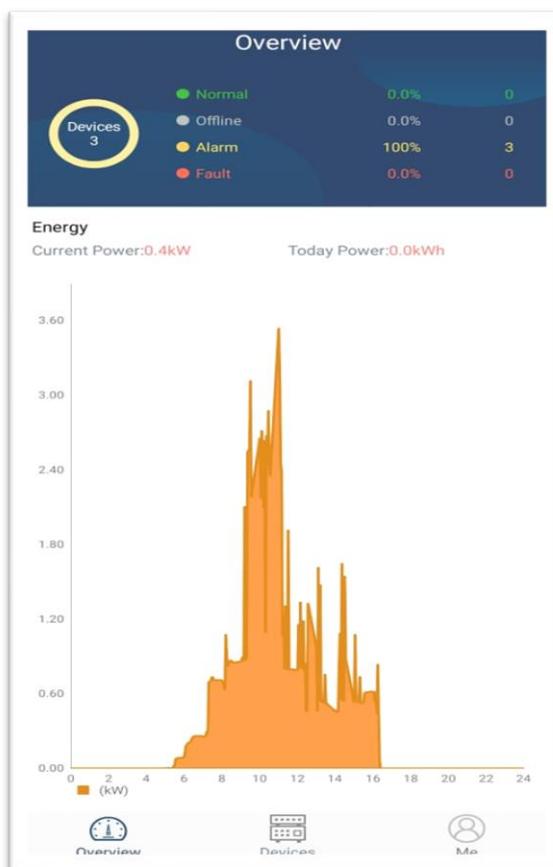
You can now easily change the parameters and settings in the inverter using Flin monitoring system app. Settings like Output settings, Battery Parameters, LED setting, Time Zone Settings and more can be altered at your fingertips from anywhere in the world.



Overview

Smart graphic interface informs you about the solar power generation*, monitors the running mode of your solar system and also notifies you of any system fault / error. This feature keeps you updated about the overall health of the system, in turn for you to make use the Flin solar inverters smartly!

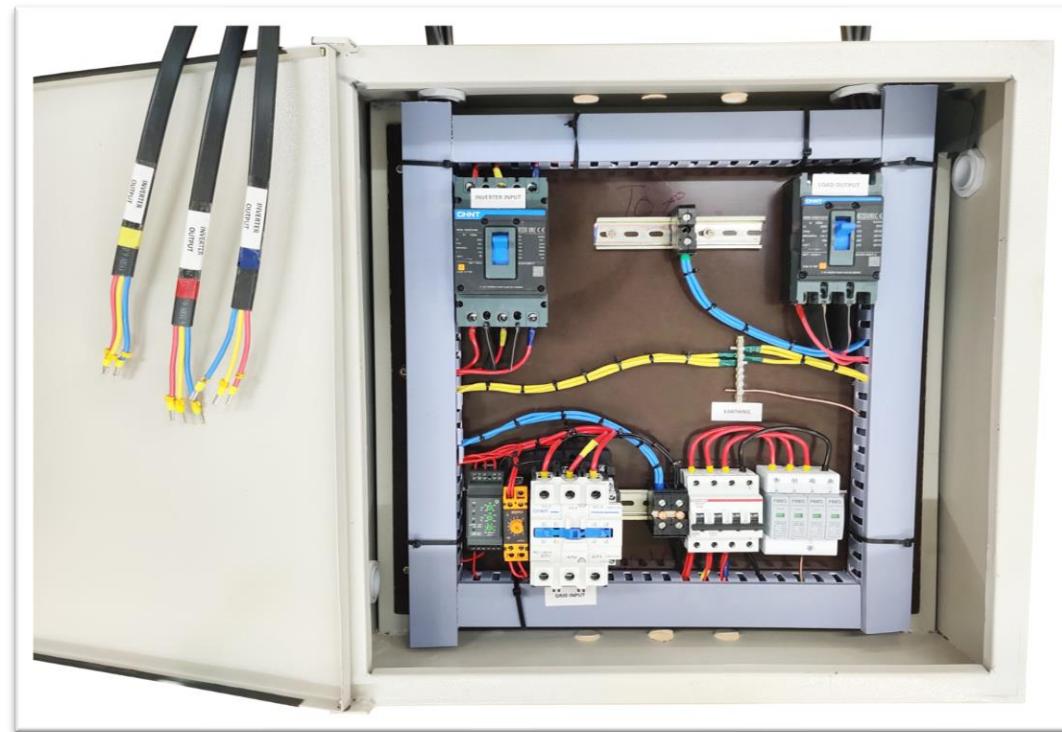
*kWH data only available for selected models only



FlinKit – Prewired Components



AC Prewired Box: Comes with 3 x DP AC MCB, 1 x 10A DP AC MCB, 1 x Voltage Regulator, 1 x 2P AC SPD, 1 x 40A Changeover and earthing terminal.



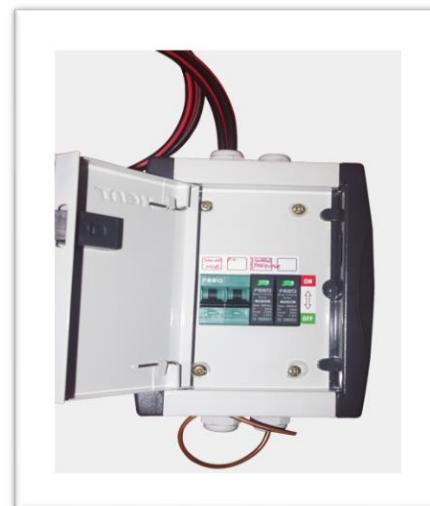
AC Distribution Box for three phase



Battery Cable Set: 50sqmm DC Cables soldered with lugs for long lasting connection and better performance



BusBar for 3 inverters in parallel



DC Prewired Box: Comes with 1 x DP DC MCB, 1 x 2P DC SPD

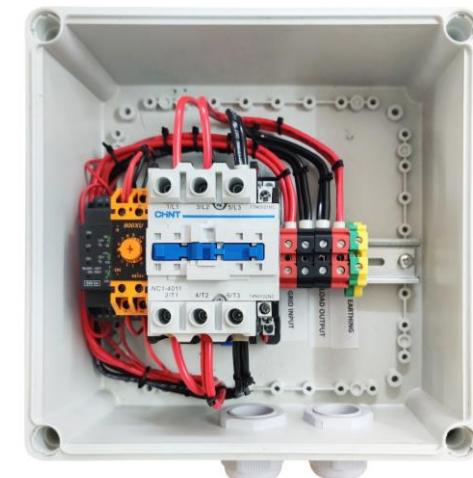


Battery Bus Bar Box to connect batteries in parallel

BusBar for 2 inverters in parallel



Combiner box to parallel the different panels strings



Protection Box for single phase

Comparison Between Flin Solar Inverters

										
Series Name	FlinSlim MPPT			FlinMarvel	FlinFuzion MPPT		FlinInfini Lite	FlinInfini Turbo	FlinInfini	
Model Name	FlinSlim MPPT Ultimate 5kVA-48V	FlinSlim MPPT Elite 7.2kVA-48V	FlinSlim MPPT Elite 8kVA-48V	FlinMarvel 5.6kVA-48V	FlinFuzion MPPT 3kVA-24V	FlinFuzion MPPT 5kVA-48V	FlinInfini Lite 4kW-48V	FlinInfini Turbo 5.6kW-48V	FlinInfini 15kW-48V	
Type	Off-Grid without Net Metering						Hybrid With Net Metering Feature			
Controller Type	MPPT									
Phase	Single Phase with Parallel Option Configurable in Three Phase by connecting three inverters in parallel				Single Phase without parallel option		Single Phase with Parallel Option Configurable in Three Phase by connecting three inverters in parallel		Three Phase	
Maximum Load Capacity	5kW	7.2kW	8kW	5.6kW	3 kW	5 kW	4 kW	5.6kW	15 kW	
I/P Rating	IP-21									
Load Sharing	Solar & Grid Solar & Battery									
Warranty	2 years - extendable to 5 years								2 Years	
Minimum Solar Array Capacity	600W	2000W			1000W	2000W	600W	2000W	3500W	
Maximum Solar Array Capacity	4kW	8kW		6kW	3 kW	5 kW	4 kW	6.5kW	22 kW	
Battery Voltage	48V				24V	48V	48V			
Connect Multiple Inverters in Parallel Single/Three Phase	Up-to 9 Inverters	Up-to 6 Inverters		Up-to 9 Inverters	N/A		Up-to 9 Inverters		Up-to 6 Inverters	
Batteries Required or Optional	Batteries Compulsorily	Optional					Batteries Compulsorily Required	Optional		
Compatible Batteries	Lead Acid Lithium LiFePo4	Lead Acid Lithium, LiFePo4 With discharge current limiting option			Lead Acid Lithium LiFePo4					
Net Metering / Export Feature	N/A						Yes			
Transfer Time	0ms	10ms (UPS Mode); 20ms (APL Mode)								
Monitoring	Inbuilt WiFi Monitoring						Software Based	Inbuilt WiFi Monitoring	Software Based	
Communication		RS 232, USB RS 485 (BMS)					RS 232 USB	RS 232, USB RS 485 (BMS)	RS 232 USB	
Timer for Load Priority and Battery Charging		Available				N/A				
Dual Output Feature To run Emergency and Non-emergency Loads	N/A							Yes	N/A	
KWh Meter	In-Built				N/A		In-Built			
Recommended Applications	1) Petrol Pumps 2) Commercial Set Up 3) Schools 4) Hospitals 5) ATMs 6) Banks 7) Residential	1) Petrol Pumps 2) Small Commercial Set Up 3) Schools 4) Dairy Farms 5) Cold Storage 6) Residential	1) Petrol Pumps 2) Small Commercial Set Up 3) Schools 4) Dairy Farms 5) Cold Storage 6) Residential 7) To use with same solar panels being used for Solar Water Pumps with DC Changeover	1) Residential 2) Small Shops 3) To use with same solar panels being used for Solar Water Pumps with DC Changeover	1) Residential 2) Small Shops 3) To use with same solar panels being used for Solar Water Pumps with DC Changeover	1) Residential 2) Commercial Set Up	1) Small Commercial Set Up 2) Schools 3) Dairy Farms 4) Cold Storage 5) Residential 6) To use with same solar panels being used for Solar Water Pumps with DC Changeover	1) Three Phase Applications 2) Commercial Set-Ups 3) Villas and Resorts 4) Palatial Farm Houses		