Flin Energy
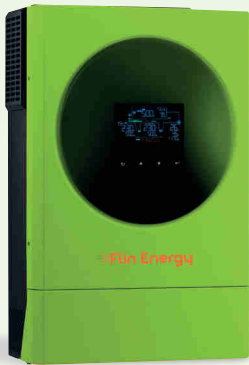
FlinInfini Turbo 6kW-48V
Solar Hybrid Inverter

Wide DC Range 6.5kW PV Input |
Dual Output for Load |
Built-in Wi-Fi Monitoring |
On-Grid with Energy Storage |

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
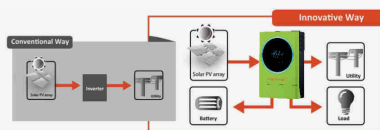
Direct Power from Solar

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.
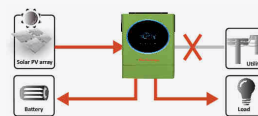
Dual Output for Load

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.

Flin Energy

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 ± 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