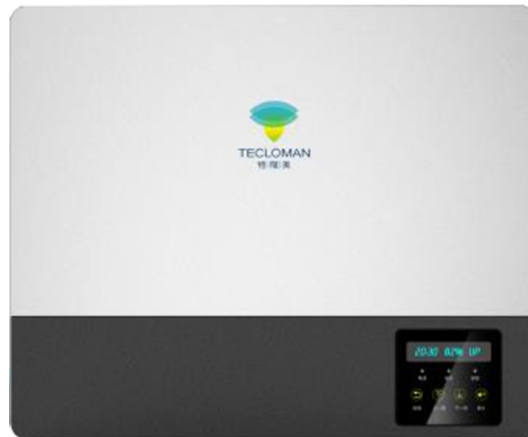




TECLOMAN



## Firefly Hybrid Inverter



### Product Overview

This product is a new type of converter device that integrates a charge controller, a bi-directional energy storage converter and a photovoltaic inverter. It has an intelligent energy management system and can be used with Firefly series battery modules to form an energy storage system. By using it residential buildings will increase photovoltaic utilization, reduce electricity costs, and improve power quality.



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## Product Features

- Intelligent energy management.
- Advanced MPPT algorithm, fully use of PV solar energy.
- Support EPS load seamless transition.
- Multiple protections to ensure reliable operation.
- Support three phase operation, single phase parallel operation and battery DC bus parallel operation.
- Outdoor wall mount and easy to install.
- National convection, noiseless.
- IP65 ingress protection design.
- Support CAN、RS485、Wi-Fi and GPRS communication.



## Product parameter

Model	Firefly-3k	Firefly-4.6k/5k
<b>Grid</b>		
Max. AC Output Apparent Power	3000VA	4600VA/5000VA
Rated Output Power	3000W	4600W/5000W
Max. AC Output Current	15A	25A
Rated AC Voltage (range)	230 ( 180~270 V )	
Frequency (range)	50/60Hz ( 45~55/55~65Hz )	
Power Factor	Adjustable, 0.8 leading to 0.8 lagging	
ITHD (@rated output)	<3%	
Connection	L / N / PE	
<b>EPS Output</b>		
EPS Max. Output Power (without/with Solar)	3600VA/5000VA	
EPS Rated Power (without Solar)	3000W	
EPS Rated Current (without Solar)	13A	
EPS Rated Output Voltage	230V	
EPS Frequency	50/60Hz	
Peak Power	4500W,30s	
THDV	<5%	
Switching Time	<0.01s	



<b>DC (Solar and Battery)</b>	
Max. Solar Input Power	6600W   8000W
Max. Solar Input Voltage	550V
MPPT Voltage Range	120 ~ 500V
MPPT Number	2
Max. Solar DC Input Current	10A   11A
Compatible Battery Type	Lithium-ion / Lead-Acid
Rated Battery Voltage (range)	48V ( 40~60V )
Max. Charge/Discharge Power	3600W / 3600W
Max. Charge/Discharge Current	66A / 66A
BMS Communication	CAN、RS485
<b>Efficiency</b>	
Max. Efficiency	97.9%
Battery Charge / Discharge Efficiency	94.5%
<b>General Data</b>	
Protections	DC reverse polarity, ground fault, short circuit and overcurrent / overvoltage
Dimensions ( W*H*D ± 2mm )	451 * 469(551) * 184 mm
Weight	20kg
Topology	Transformerless (solar), HF (battery)
Cooling	Natural Convection
Operating Temperature / Relative Humidity	-25~60℃ / 0~100%Rh
Altitude	<2000m
Noise Emission	<25dB
Display and communication	LCD, LED, RS485, Wi-Fi ,CAN
Ingress Protection	IP65/Nem4X
Certifications & Approvals	EN50549-1, G98, G83, G59, AS4777.2:2015, VDE0126-1-1, VDE-AR-N4105, CEI 0-21 IEC62109-1/-2, IEC62040-1, EN61000-6-1, EN61000-6-2, EN61000-6-3