### **Balcony Battery**

Maximum storage: 4\*2kWh.

- Cell type: high quality LifePO4 cells.
- Max 4 pcs batteries in parallel.
- Rated voltage: 51.2Vdc, charge and discharge rate: 40A max.
- Long cycle life≥6000cycles@ 80% DOD.
- Long-life design and superior performance.
- Wi-Fi communication, smart APP real-time monitoring.
- Safe and Reliable: compliant with CE, UN38.3, IEC62619, UL1973.
- IP class: IP65.



ı	Model	IFDZ000L-LFF
	Nominal voltage Nominal energy@0.2C Usable energy@0.2C Nominal capacity@0.2C Internal resistance@1khz AC Operation voltage range  Charge voltage Float voltage Allowed MAX charge current Recommend charge current Allowed MAX discharge current Recommend discharge current Recommend discharge current Deak/Surge current limit Short circuit protection End Discharge (Re-charge voltage) End Discharge (Inverter/Load cut off) End Discharge (Re-start voltage) Communication Parallel and Series connection Cycle life	51.2V 2.048kWh 1.97KWh 40Ah ≤30 mOhm (With communication): 48V-56V / (Without communication): 44.8V-57.6V 56.0V 54.6V 40A ≤20A 40A ≤20A 50A@15S/60A@1s Yes 50.0V 48.0V 52.0V CAN/RS485 Support Max. 4 in parallel 24000 cycles. After Normal charge, discharge @0.2C current with 90%DOD, Repeat above process until discharge capacity
	Operation temperature1  Operation altitude  Self-discharge rate² (Residual capacity)  Self-discharge rate² (Recover capacity)  Storage environment³ (≤3 months)  Storage environment³ (>3 months)  Storage environment³  Installation types  IP rating  Dimension(W*H*D)  Weight (without accessories)	reduce to 60% of initial value.  Charge (With communication): -10~50°C / Discharge (With communication): -20-50°C  <3000m  ≤3%/month   ≤15%/years  ≤1.5%/Month   ≤8%/ year  -10~45°C   5~90%RH  15~35°C   45~85%RH  15~35°C   45~85%RH (Recommend environment)  Stack  IP65  400*226*210mm  ~23kg/50.7lb)



## Intelligent shutoff Intelligent Circuit Breaker for household

- Digital intelligent communication.
- Advanced low-voltage electrical technology.
- Electromagnetic drive and other technologies.
- Factory high-power equipment circuit.
- Intelligent control, measurement, early warning, protection and other safety and convenient functions.



	Model	TPS63-1PN	
	Rated operational voltage	230V	
	Pole No.	1P+N	
Electrical	Breaking ability	6kA	
Specs	Rated current	16/20/25/32/40/50	
	Mechanical life	20,000	
	Wiring capacity	25mm <sup>2</sup>	
	Installation	2M (2P)	
	Voltage metering accuracy	0.5%FS	
-1	Current metering accuracy	0.5%FS	
Electrical	Power metering accuracy	1%FS	
Specs	Electricity metering accuracy	1%FS	
	Switch on acting time	20ms	
	Switch off acting time	5ms	
	Overload protection	Integrated	
	Overvoltage protection	Integrated	
	Undervoltage protection	Integrated	
Duatastian	Leakage alarm realized by software	Integrated	
Protection Feature	Over temperature alarm	Integrated	
	Power limit protection	Integrated	
	Overvoltage recovery delay	Integrated	
	Undervoltage auto recovery	Integrated	
	Leakage protection realized by hardware	Integrated	
	Operating temperature	Altitude<2000m	
Others	Dimensions (LxWxH)	130x147x100mm	
	Weight	≈1kg	















### **TOPBAND** CO-INNOVATING A SMARTER FUTURE

## **Balcony Solar Energy Storage Solutions**

Balcony energy storage solutions are ultra-small distributed photovoltaic systems, also known as plug-in photovoltaic systems, that are compact in layout, small in size, and easy to install or move away from.

Users only need to fix the photovoltaic system to the balcony railing, plug the system cable into the home outlet, and use solar power to generate electricity supply.

# \*On grid: 800W. \*Back up: 1200W \*Description \*On grid: 800W. \*Back up: 1200W. \*Battery voltage: 28~59Vdc, 35A max. \*2 MPPT trackers, 1220W max. \*UPS level switching <10ms. \*Smart APP real-time monitoring. \*Support Intelligent shutoff. \*IP class: IP65.

Model TPI1200-HS

	Nominal voltage range	12~53Vdc
	Input voltage range	12~57Vdc
DC lanut	Max. Input DC voltage	Max.59Vdc
DC Input	Input current	14A
(PV)	Standby power dissipation	Max.4W
	Reverse input	Nonsupport
	MPPT Tracker	2
	Input voltage range	28-59Vdc
DC Input (battery)	Max. Input DC Voltage	Max.59Vdc
	Inrush current	No requirement
	Input current	35A
	Leakage current	Max.0.5A
	No-load power dissipation	Max.6W
	Reverse Input	Nonsupport
	Output voltage	176~ 260Vac
	Rated output power	800W
AC output	Max. AC apparent power	1000VA
(On grid)	AC grid frequency	50/60 Hz
(On grid)	Max. output current	3.7A
	Power factor	0.8leading0.8lagging
	THDI	Max.3 (Full of load)
	Battery to AC efficiency	94%Max
	PV to Battery efficiency	97% max
AC output	AC grid connection type	Single phase
(Off grid)	AC nominal power	1200W
, ,	Max. AC apparent power	1200VA
	Nominal AC voltage	230V
	AC grid frequency	50/60 Hz
	Max. output current	5.2A
	Max. input current	Single phase
AC Input (on-grid)	Max. apparent power	1600VA
	Nominal AC voltage	230V
(211 8112)	Max. input current	8A
	AC grid frequency	50/60 Hz
	Input over voltage protection	Integrated
Protection	Input under voltage protection	Integrated
	Over temperature protection	Integrated
devices	Output over power protection	Integrated
uevices	Short output protection	Integrated
	Output under voltage protection	Integrated
	Output over voltage protection	Integrated
Others	Constant power output protection	Integrated
	Ingress Protection	IP65
	Protective Class	Class I
	Operating Ambient Temp.	-40°C~+50°C
	Power factor range	0.8leading~0.8lagging
	Display	LED+APP (Wi-Fi+Bluetooth)
	Interfaces	RS485, CAN
	Warranty	5 Years
	Dimensions (LxWxH)	321x285x54mm
	Weight	≈5kg

# \*On grid: 2000W. \*On grid: 2000W. \*Back up: 2000W. \*Battery voltage: 40~59Vdc, 41.5A max. \*UPS level switching <10ms. \*Smart APP real-time monitoring. \*Support Intelligent shutoff. \*IP class: IP65.

Balcony energy storage Solution

	_ Model	TPI2000-HS
	Nominal voltage range	
	Input voltage range	
	Max. Input DC voltage	
DC Input	Input current	
(PV)		
	Standby power dissipation	
	Reverse input	
	MPPT Tracker	
DC Input (battery)	Input voltage range	
	Max. Input DC Voltage	
	Inrush current	
	Input current	
	Leakage current	
	No-load power dissipation	
	Reverse Input	
	Output voltage	
	Rated output power	
AC output	Max. AC apparent power	2000VA
(On grid)	AC grid frequency	50/60 Hz
(Oli gila)	Max. output current	8.7A
	Power factor	0.8leading0.8lagging
	THDI	Max.3 (Full of load)
AC output (Off grid)	Battery to AC efficiency	92%max
	PV to Battery efficiency	
	AC grid connection type	
	AC nominal power	0 1
	Max. AC apparent power	
	Nominal AC voltage	
	AC grid frequency	
	Max. output current	
	Max. input current	
AC Input (on-grid)	Max. apparent power	0 1
	Nominal AC voltage	
	Max. input current	
	· .	
	AC grid frequency	,
	Input over voltage protection	Integrated
	Input under voltage protection	Integrated
Protection devices	Over temperature protection	Integrated
	Output over power protection	Integrated
	Short output protection	Integrated
	Output under voltage protection	Integrated
	Output over voltage protection	Integrated
	Constant power output protection	Integrated
	Ingress Protection	IP65
	Protective Class	Class I
	Operating Ambient Temp.	-40°C~+50°C
Others	Power factor range	
		LED+APP (Wi-Fi+Bluetooth)
	Interfaces	, , ,
	Warranty	5 Years
	Dimensions (LxWxH)	378x298x86mm
	Weight	
	vveignt	- ong

## \*\*On grid: 2300W. \*\*Dance of the properties of

Balcony energy storage Solution

Model TPI3000-HS Nominal voltage range | 12~53Vdc Input voltage range | 12~57Vdc Max. Input DC voltage | Max.59Vdc DC Input Input current | 30A Standby power dissipation | Max 4W Reverse input Nonsupport MPPT Tracker 2 Input voltage range 40-59Vdc Max. Input DC Voltage | Max.59Vdc DC Input Inrush current No requirement (battery) Input current 60A Leakage current | Max.0.5A No-load power dissipation Max.6W Reverse Input Nonsupport Output voltage | 176~ 260Vac Rated output power 2300W Max. AC apparent power 2300VA AC output AC grid frequency 50/60 Hz (On grid) Max. output current | 10A Power factor | 0.8leading...0.8lagging THDI Max.3 (Full of load) Battery to AC efficiency 93%max PV to Battery efficiency 97% max AC grid connection type | Single phase AC output (Off grid) AC nominal power 3000W Max. AC apparent power | 3000VA Nominal AC voltage 230V AC grid frequency 50/60 Hz Max. output current 13A Max. input current | Single phase Max. apparent power | 3000VA AC Input Nominal AC voltage 230V (on-grid) Max. input current | 13A AC grid frequency 50/60 Hz Input over voltage protection | Integrated Input under voltage protection | Integrated Over temperature protection | Integrated Protection Output over power protection | Integrated devices Short output protection | Integrated Output under voltage protection | Integrated Output over voltage protection Integrated Constant power output protection | Integrated Ingress Protection | IP65 Protective Class | Class | Operating Ambient Temp. | -40°C~+50°C Others Power factor range | 0.8leading~0.8lagging Display LED+APP (Wi-Fi+Bluetooth) Interfaces RS485, CAN Warranty 5 Years Dimensions (LxWxH) 378x298x86mm Weight | ≈6.5kg