

# TEL-Series

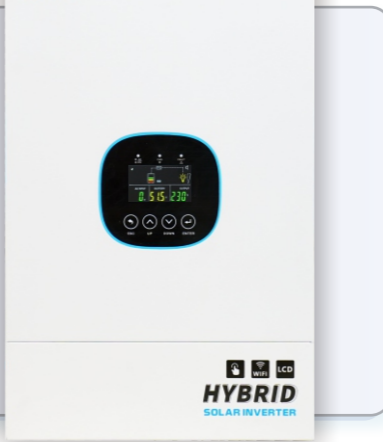
## Off Grid Single Phase Solar Inverter



Single Phase | 120VAC

5KW

- Pure Sine Wave Out
- >92% Efficiency
- Lithium Battery Supported
- Intelligent Charging Management
- Multi-layer Protection



The TEL Series is a professional hybrid solar inverter charger for backup, off-grid, and energy storage systems. It features pure sine wave output (5KW rated, 10KW surge power), ≤10ms typical transfer time, supports up to 1~6 units parallel, and includes a hybrid charger (up to 100A) compatible with lead-acid and lithium batteries.

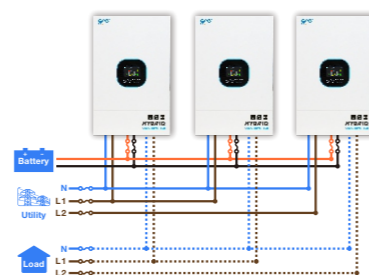
### FEATURES

- Rated power 5KW.
- Pure sine wave AC output.
- Parallel operation supported.
- With BMS / COMM communication.
- WiFi remote monitoring (optional).
- Grid-powered only, battery-free operation.
- System will go to bypass and cut off charging if an error happens under utility grid mode.

### PARALLEL & THREE-PHASE OPERATION UP TO 6 UNITS



Parallel Operation in Single phase



Support Split-phase Parallel Connection

Models	5KW
Permitted parallel number	1~6units
<b>AC mode</b>	
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	>92%
Conversion time (bypass and inverter)	10ms(typical)
AC reverse protection	Available
Maximum bypass overload current	63A
<b>Inverter mode</b>	
Output voltage waveform	Pure sine wave
Rated output power (VA)	5000
Rated output power (W)	5000
Power factor	1
Rated output voltage (Vac)	120Vac (100/105/110VacSettable )
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 1 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	10000VA
Loaded motor capability	4HP
Rated battery input voltage	48V(Minimum starting voltage 44V)
Battery voltage range	undervoltage alarm/turnoff volatage/ overvoltage alarm/overvoltage restoration...settable LCD screen
Power saving mode self consumption	Load≤50W
<b>AC output(Grid)</b>	
Rated Output Power (W)	5000W
Max.apparent power(VA)	5000VA
Max.output current(A)	41.7A
THDI	<3%
Rated voltage(V)	120Vac
Frequency	50Hz/60Hz(Auto detection)
<b>AC charging</b>	
Battery type	Lead acid or lithium battery
Maximum charge current(can be set)	0-40A
Charge current error	± 3Adc
Charge voltage range	40-58Vdc
Short circuit protection	Circuit breaker and blown fuse
Circuit breaker specifications	63A
Overcharge protection	Alarm and turn off charging after 1 minute
<b>PV charging</b>	
Maximum PV open circuit voltage	500Vdc
PV operating voltage range	60-500Vdc
MPPT voltage range	60-450Vdc
Battery voltage range	40-60Vdc
Maximum PV input power	5500W
Maximum PV input current	22A
PV charging current range (can be set)	0-100A
Charging short circuit protection	Blown fuse
Wiring protection	Reverse polarity protection
<b>Hybrid charging Max charger current specifications (AC charger+PV charger)</b>	
Max charger current(can be set)	0-100A
<b>Certified specifications</b>	
EMC certification level	EN61000
Operating temperature range	-10°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 contact control
Product Size(D*W*H)	499mm*340mm*143mm
Packing Size(D*W*H)	555mm*415mm*225mm
N.W.(Kg)	12.70KG
G.W.(Kg)	14.32KG