T-REX Hybrid Inverter

T-REX-50KHP3G01

FelicityESS

Product Features

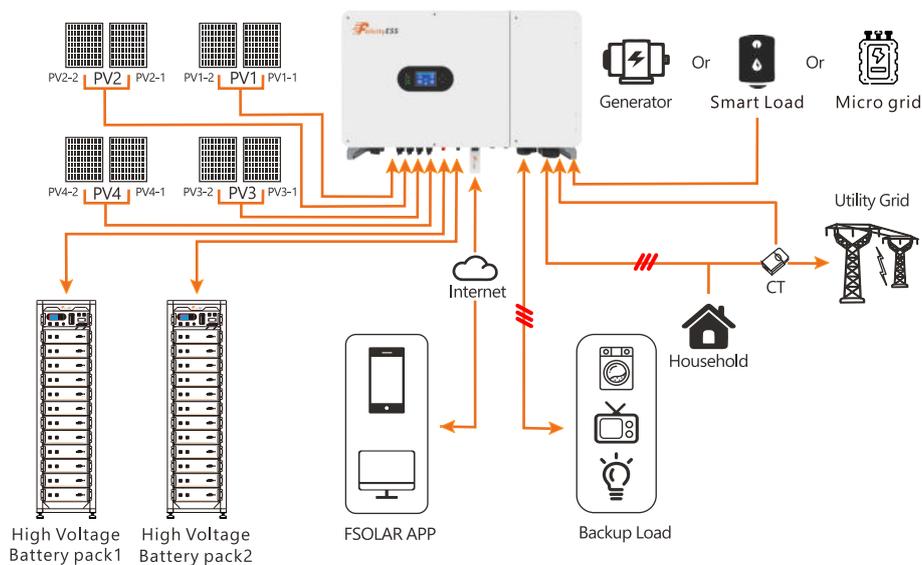|		
3.5-inch LCD touch screen	Smart Cloud Monitoring System	2 independent battery inputs
Programmable generator port	Support multi Working mode	The maximum support is 12 parallel machines.	IP65 protection grade

Connection diagram

PV2-2 PV2 PV2-1   PV1-2 PV1 PV1-1

PV4-2 PV4 PV4-1   PV3-2 PV3 PV3-1

Generator   Or   Smart Load   Or   Micro grid

Utility Grid

Internet

CT

Household

High Voltage Battery pack1   High Voltage Battery pack2

FSOLAR APP

Backup Load

Specification

Model	T-REX-50KHP3G01
Battery Input Data	
Battery Type	LFP (LiFePO4)
Battery Voltage Range	160~800Vd.c.
Max. Charging Current	50+50(A)
Max. Discharging Current	50+50(A)
Number of battery input	2
PV String Input Data	
Max. DC Input Power	65KW（16KW for single PV）
Max. DC Input Voltage	1000Vd.c.
Min. DC Input Voltage	150Vd.c.
Start-up Voltage	250Vd.c.
Rated DC Input Voltage	600Vd.c.
MPPT Range	200~850Vd.c.
Full Load DC Voltage Range	450~850Vd.c.
PV Input Current	36+36+36+36(A)
Max. PV Isc	55+55+55+55(A)
No.of MPP Trackers	4
No.of Strings per MPP Tracker	2
AC Output Data	
Rated AC Output Power	50 kW
Max. AC Output Power	55 kW
AC Output Rated Current	72.5 A
Max. AC Current	79.7 A
Rated AC Voltage	220/380,230/400 Vac (-20%~+15%)
AC Wiring Mode	3W+N+PE
Rated AC Frequency	50 /60 Hz (45~55Hz/55~65Hz)
THDI	<3% (At Rated Power)
Power Factor	0.8(leading) to 0.8(lagging)
Efficiency	
Max. efficiency	97.6%
Euro efficiency	97.0%
MPPT efficiency	99.9%
Protection	
PV Input Lightning Protection,	
PV String Input Reverse Polarity Protection,	
Battery Input Lightning Protection,	
Battery Input Reverse Polarity Protection,	
Insulation Resistor Detection,	Integrated
Residual Current Monitoring Unit,	
Output Over Current Protection,	
Output Shorted Protection,	
Output Over Voltage Protection,	
Anti-islanding Protection,	
AC Output Lightning Protection。	
Certification and Standards	
Grid Regulation	NRS 097-2-1,VDE4105,EN50549-1,AS 4777.2 G99/1,CEI 0-21,NC. RFG
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4,IEC/EN 62109-1,IEC/EN 62109-2
General Data	
Net Weight	85.6KG
Gross Weight	98.4KG
Product Dimension	940*582*340mm
Package Dimension	1110*770*463mm
Protection Degree	IP65
Operating Temperature Range	-25 to 60 ℃ (> 50 ℃ derating)
Humidity	0 ~ 95 % (No condensation)
Cooling	Smart cooling
Altitude	3000 m (> 2000 m derating)
Communication with BMS	RS485,CAN
Monitor module	WiFi/GPRS
Installation Style	Wall-mounted
Warranty[1]	10 years

[1]Conditions apply, refer to FelicityESS Warranty Letter.

*According to local grid-connected standards