



T-REX Hybrid Inverter

T-REX-50KHP3G01



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

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	65 kW	
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/3W+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,	Integrated	
PV String Input Reverse Polarity Protection,		
Battery Input Lightning Protection,		
Battery Input Reverse Polarity Protection,		
Insulation Resistor Detection,		
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,GB/T 34120,GB/T 34133,GB/T 34129	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4,IEC/EN 62109-1,IEC/EN 62109-2	
General Data		
Protection Degree	IP65	
Operating Temperature Range	-25 to 60 °C (> 50 °C 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	
Net Weight(KG)	85.6KG	
Gross Weight(KG)	98.4KG	
Product Dimension(MM)	940*340*582MM	
Package Dimension(MM)	463*770*1110MM	

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

*According to local grid-connected standards