



The picture is for reference, subject to the actual contract

- Wide battery voltage range 85~400V
- Protection Degree IP65
- Charge and discharge protection
- Battery reverse connection protection
- The battery power can be 5~15kW
- Pre-wired, plug & play

Smart Energy Controller (Single Phase)

N-Series

Technical Data

Model	TES300-5K-NO1
Battery Input Data	
Battery Type	Lithium-ion
Battery Voltage Range (V)	85-450
Max. Charging Voltage (V)	450
Max. Charging/Discharging Current (A)	20
Max. Charging/Discharging Power (W)	5000 (Battery 0.5C)
PV String Input Data	
Max. DC Input Power (W)	6000
Max. DC Input Voltage (V)	550
MPPT Range (V)	150-550
Start-up Voltage (V)	160
MPPT Nominal Voltage (V)	360
Max. Input Current Per Trackers (A)	13.5
Max. Short Current Per Trackers (A)	15.2
No.of MPPT Trackers	2
No.of Strings Per MPPT Tracker	1
AC Output Data (On-grid)	
Nominal Output Power (W)	5000
Max. AC Output Power (W)	6000
Max. AC Output Current (A)	24
Output Voltage Range (V)	180-270
Nominal Output Voltage (V)	230
Nominal Output Frequency (Hz)	50/60
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)
Output THDi (Nominal Output)	<3%
AC Output Data (Off-grid)	
Nominal Output Power (W)	5000
Nominal Output Voltage (V)	230
Nominal Output Frequency (Hz)	50/60
Automatic Switch Time (ms)	≤10
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	97.00%
MPPT Efficiency	99.80%
General Data	
Safety Regulation	Class I
Protection	DC Input Switch, DC Anti-reverse Protection, Battery Input Reverse Polarity Protection, Output Over Current Protection, Output Over Voltage Protection, Ground Fault Protection, Output Over Temperature Protection, Abnormal Grid Voltage, Frequency of Abnormal, etc
Protection Degree	IP65
Operating Temperature	-25°C ~ +60°C
Altitude (m)	>2200m Derating
Noise (dB)	≤35
Standby Self Consumption (W)	<4
Topology	Transformerless
Cooling	Natural Convection
Communication with BMS	CAN, RS485
Grid Connection Type	1+N+PE
Installation Style	Wall Bracket
Weight (kg)	24
Size (mm)	476*464*180
Weaver function	The equipment can meet the requirements of 3 off-grid and parallel machines
Recommended quantity of electricity	5-15kWh
Certifications and Standards	
Grid Regulation	VDE4105
Safety Regulation	IEC62109-1/-2
EMC	EN61000-6-1/ EN61000-6-2/ EN61000-6-3