



6 | 6 time periods for battery charging/discharging

| Colorful touch LCD, IP65 protection degree

16 | Frequency droop control, Max.16pcs parallel

| DC couple and AC couple to retrofit existing solar system

120 | Max. charging/discharging current of 120A

| Support storing energy from diesel generator

Smart Energy Controller (Single Phase)

S-Series — Support diesel engine power generation function

Technical Data

Model	TES300-3.6K-SO1	TES300-4K-SO1	TES300-4.6K-SO1	TES300-5K-SO1
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40~60			
Max. Charging Current (A)	90	100	110	120
Max. Discharging Current (A)	90	100	110	120
Charging Curve	3 Stages / Equalization			
External Temperature Sensor	Yes			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	4680	5200	5980	6500
PV Input Voltage (V)	370 (100~500)			
MPPT Range (V)	125~425			
Full Load DC Voltage Range (V)	240~425			
Start-up Voltage (V)	150			
PV Input Current (A)	13+13			
Max. PV ISC (A)	17+17			
No. of MPPT Trackers	2			
No. of Strings Per MPPT Tracker	1+1			
AC Output Data				
Rated AC Output and UPS Power (W)	3600	4000	4600	5000
Max. AC Output Power (W)	3960	4400	5060	5500
Peak Power (off grid)	2 times of rated power, 10s			
AC Output Rated Current (A)	15.7	17.4	20.0	21.7
Max. AC Current (A)	18.0	19.1	22.0	25.0
Max. Continuous AC Passthrough (A)	35			
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50/60Hz; 220/230 / 240Vac (single phase)			
Grid Type	Single Phase			
Current Harmonic Distortion	THD<3% (Linear load<1.5%)			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	96.50%			
MPPT Efficiency	99.90%			
Protection				
PV Input Lightning Protection	Integrated			
Anti-islanding Protection	Integrated			
PV String Input Reverse Polarity Protection	Integrated			
Insulation Resistor Detection	Integrated			
Residual Current Monitoring Unit	Integrated			
Output Over Current Protection	Integrated			
Output Shorted Protection	Integrated			
Output Over Voltage Protection	Integrated			
Surge protection	DC Type II / AC Type II			
Certifications and Standards				
Grid Regulation	IEC61727, IEC62116, IEC61683			
Safety Regulation	IEC62109-1, IEC62109-2			
EMC	IEC61000-6-1, IEC61000-6-3			
General Data				
Operating Temperature Range (°C)	-25~+60°C (> 45°C Derating)			
Cooling	Natural cooling			
Noise (dB)	<30			
Communication with BMS	RS485; CAN (BMS)			
Weight (kg)	20.5			
Size (mm)	330×580×232			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			