All-in-one AC Coupled Unit

TSUN MORE SAFETY MORE POWER

3.0K/3.6K/4.0K/4.6K/5.0K/6.0K



Flexibility

Compatible with on-grid PV systems; easy retrofit.

Integrated battery design; supports standalone installation and battery expansion.

Multiple operation modes for varied scenarios

Reliability

IP65-rated; suitable for indoor and outdoor use.

Fanless, silent cooling by natural

High-frequency battery-inverter isolation for enhanced safety.

Usability

High charge/discharge efficiency.

Flexible monitoring options.

Up to 3000VA emergency power supply.

Precise reverse flow prevention, adjustable self-consumption ratio.

CE

VDE 4105

CEI 0-21

G98

IEC/EN 62619

UN38.3

AS4777

TSUNESS Co., Ltd

Technical Data

Model	ACU3.0K	ACU3.6K	ACU4.0K	ACU4.6K	ACU5.0K	ACU6.0K
Battery Data						
Battery Type			LiFePO ₄			
Battery Capacity per Kit [kWh]			5.12			
Battery Voltage per Kit [V]	51.2					
Max. Battery Quantities per System	4 (Up to 20.48 kWh)					
Max. Charging Power [W]	3000	3600	4000	4600	5000	6000
Max. Charging/ Discharging Current [A]	60/60	72/72	80/80	92/92	100/100	120/120
AC Input & Output [On-grid]						
Rated Output Power[W]	3000	3600	4000	4600	5000	6000
Max. Output Power [VA]	3300	3680	4400	4600	5500	6000
Rated Output Current [A]	13	16	17.4	20	21.7	26
Max. Output Current [A]	14.3	16	19.1	20	21.7	28.7
Rated Output Voltage [V]	220/230/240, L/N/PE					
Rated Grid Frequency [Hz]	50/60					
Power Factor [cos φ]	0.8 leading 0.8 lagging					
Total Harmonic Distortion [THDi]	<3%					
AC Output [Back-up Mode]						
Rated Output Power[W]	3000	3600	4000	4600	5000	6000
Max. Output Current [A]	13	16	17.4	20	21.7	26
Rated Output Voltage [V]	220/230/240, L/N/PE					
Rated Output Frequency [Hz]	50/60					
Fotal Harmonic Distortion of Voltage	<3%					
Switch Time [ms]	<20					
Peak Output Apparent Power [VA]	3600VA, 60sec	4048VA, 60sec	4400VA, 60sec	5060VA, 60sec	5500VA, 60sec	6600VA, 60sed
Efficiency						
Max. Battery Charging/ Discharging Efficiency			95.0% / 95.0%			
Protection			Protection			
Battery Input Reverse Polarity Protection Integrated		Topology		Transformerless		
AC Short Circuit Protection	ort Circuit Protection Integrated		Ingress Protection		IP65	
Overload Protection	pad Protection Integrated		Operating Temperature Range		-30~+60°C	
Surge Protection	Protection Integrated		Ambient Humidity		0~100%	
Residual Current Protection	Current Protection Integrated		Altitude		4000m(>3000m power derating	
AC Overvoltage/Undervoltage Protection	vervoltage/Undervoltage Protection Integrated		Noise[dBA]		<25	
Overfrequency/Underfrequency Protection Integrated		Cooling Method		Natural Convection		
Over Temperature Protection	Integrated		Discouring Florence Transfer T		650*428*207 (Inverter)	
i-islanding protection Integrated		Dimensions[H*W*D][mm]		650*355*207 (Battery)		
Interface			Weight[kg]		20 (Inverter)/50 (Battery)	
lattery Connection Type		Standard Warranty [Inverter]		5 years		
AC Connection Type	Plug-	in Connector	Standard Warranty [Battery]		10 years or 6000 cycle 80% Dol (whichever comes first)	
Communication	Wi-Fi	4G(Optional)				