

# Applicable to C&I Energy Storage Scenarios

## 50/60kW-221kWh Distributed Photovoltaic Energy Storage Hybrid System

### Product Models

- ◆ KYT50kW-221kWh-A
- ◆ KYT60kW-221kWh-A



### Plug-in Installation



Easy installation  
labor saving

### Four-Level Fire Protection



Accurate monitoring to  
prevent problems  
Multiple barriers, solid  
protection

### Support Diesel Engine



Optimize resource  
allocation Enhance  
power supply reliability

### Multiple Systems in Parallel



Up to 40 units can be  
connected in parallel

\*Requires parallel controller(under grid  
connected condition)

Model	KYT50kW-221kWh-A	KYT60kW-221kWh-A
<b>PV Input Data</b>		
Max. Input Power[W]	85000	102000
Max. Input Voltage[V]		1000
Operating Voltage Range[V]		180~900
Max. Input Current[A]		36/36/36/36
Max. Short Circuit Current[A]		42/42/42/42
Number of MPPT Trackers		4
Number of Strings per MPPT		2/2/2/2
MPPT tracking efficiency (%)		99.99
<b>AC Output Data(On-grid interface)</b>		
Nominal Output Power[W]	50000	60000
Max. Apparent Output Power [VA]	55000	66000
Max Input Power[W]		60000
Nominal Output Voltage[Vac]		380/400V,3L/N/PE
Nominal Output Frequency[Hz]		50/60
Max. Output Current[A]	79	95
Max. Three-phase Unbalanced Output Current[A]	79	95
Power grid bypass current (A)		87
Power Factor		~1(0.8 lead to 0.8 lag can be set)
Total Harmonic Distortion[%]		<3
<b>AC Data(Off-grid interface)</b>		
Nominal Output Power[W]	50000	60000
Max. Apparent Output Power [VA]	55000	66000
Nominal Output Voltage[Vac]		380/400V,3L/N/PE
Nominal Output Frequency[Hz]		50/60
Max. Three-phase Unbalanced Output Current[A]	79	95
Max. Output Single-phase Apparent Power[VA]	18000	22000
Peak Output Apparent Power[VA](60s)	60000	72000
Peak Output Apparent Power[VA](10s)	75000	75000
On/Off grid switching time [ms]		<10
<b>AC Data(Diesel Gen.)</b>		
Nominal Voltage[Vac]		380/400V,3L/N/PE
Nominal Frequency[Hz]		50/60
Nominal Input Apparent Power[VA]	50000	60000
<b>Efficiency</b>		
Efficiency of System [%]		88 (0.5C charge & discharge @25±2°C)
<b>Battery Data</b>		
Battery type		LFP
Nominal Voltage[V]		704
Working voltage range[V]		616~803
Battery model		KY-64V314AH
Max. Charge/Discharge Power[W]	50000	60000
Cycle		cell ≥8000 cycles , 25±2°C, 0.5C, 90%DOD, 70%EOL
Nominal Charge/Discharge Current[A]	71/71	85/85
Number of Batteries		11
Single Battery Capacity[kWh]		20.09
Nominal Capacity[kWh]		221
90%DOD Available Capacity[kWh]		199
<b>Temperature Control System</b>		
Temperature Control System		Intelligent air conditioning
<b>Fire Fighting System</b>		
Active		Detector+ Condensed aerosol fire extinguishing device+ Water Fire Protection
Passive		Condensed aerosol fire extinguishing device
Explosion-proof		Passive pressure explosion-proof valve
<b>General Data</b>		
Operating Temperature Range[°C]		-20~50 (> 45 derating)
Altitude[m]		<2000
Ingress Protection Rating		IP54
Relative Humidity[%]		0~95, No condensation
Dimension(W*H*D)[mm]		1200*1578*2340
Weight [kg]		2250
<b>Certification</b>		
Safety Standards		EN 62109-1/-2
EMC Standards		IEC/EN 61000-6-1/-2/-3/-4
On-grid Standard		CEI 0-21,NRS097-2-1:2017,VDE-AR-N 4105:2018, CQC 3310-2014

\*Specifications are subject to the actual nameplate of the product