

Efficient.  
Reliable.  
Cool.



# TK + A-KOOL

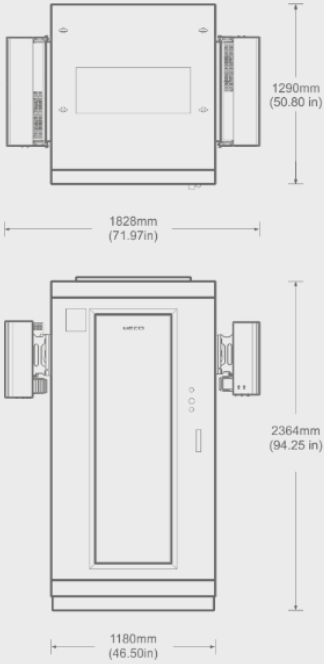
AIR COOLED ALL - IN - ONE BESS

Hybrid Inverter 25 ~ 100 kW & 108 kWh Integrated Outdoor Cabinet



# TK + A-KOOL

HYBRID CABINET ALL IN ONE



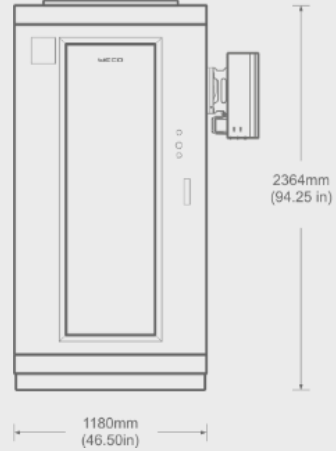
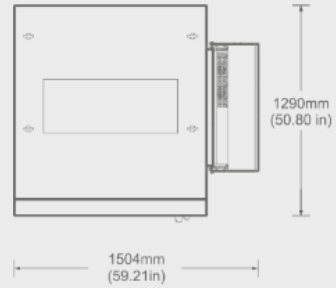
DOUBLE INVERTER  
50~100Kw



The above-mentioned temperatures are limited to the BMS ranges, such values may not be covered by the performance warranty. We recommend contacting WeCo for the most up-to-date datasheet, read warranty and manual before making any purchasing decisions. No part of this document can be copied or reproduced without WeCo written permission. All data is subject to change without prior notice.

# TK + A-KOOL

HYBRID CABINET ALL IN ONE



SINGLE INVERTER  
25~50Kw

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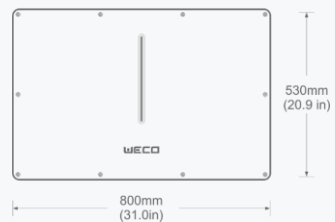
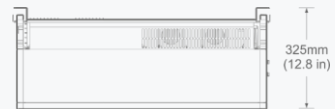
# TK + A-KOOL

## THREE-PHASE HYBRID INVERTER



### Specifications

	25 KW	30 KW	40 KW	50 KW
PV INPUT	Max. Power of PV Array			
	37,5 kW	45 kW	60 kW	75 kW
	Max. Input Voltage			
	1000 V			
	MPPT Voltage Range			
	200 ~ 850 V			
	Min. Input Voltage / Start voltage			
	200 V			
BATTERY	No. of Independent MPPT Trackers			
	4			
	No. of Independent MPPT Strings per MPPT Input			
	2			
AC OUTPUT	Max. Input Current per MPPT Tracker			
	30 A			
	Max. Short-circuit Current per MPPT Tracker			
	40 A			
	Battery Type			
	WECO LFP			
	Battery Voltage Range			
	135 ~ 860 VDC			
AC INPUT	Max. Charging Current / Max. Discharging Current			
	100 A / 100 A			
	Rated Charging / Discharging Current			
	100 A / 100 A			
	Normal AC Voltage			
	3W+N+PE, 220 / 380 V ; 230 / 400V ; 240 / 415 V			
	AC Voltage Range			
	360 ~ 400 VAC			
	Rated AC Grid Frequency			
	50 / 60 Hz			
	AC Grid Frequency Range			
	50 ± 5 Hz / 60 ± 5 Hz			
BACKUP OUTPUT	Rated Active Power			
	25 kW	30 kW	40 kW	50 kW
	Rated Apparent Output Power			
	27.5 kVA	33 kVA	44 kVA	55 kVA
	Rated Grid Output Current (@400 V)			
	42 A	50 A	66 A	83 A
	Harmonics THDI (@Nominal power)			
	< 3%			
	Rated Grid Voltage			
	3W+N+PE, 220 / 380 V ; 230 / 400V ; 240 / 415 V			
	Rated Grid Frequency			
	50 / 60 Hz			
EFFICIENCY	Rated Active Power			
	25 kW	30 kW	40 kW	50 kW
	Max. Apparent Output Power			
	27.5 kVA	33 kVA	44 kVA	55 kVA
	Peak Active Output Power			
	27.5 kVA	33 kVA	44 kVA	55 kVA
EFFICIENCY	Rated Current (@400V)			
	42 A	50 A	66 A	83 A
	Max. Output Current			
	42 A	50 A	66 A	83 A
	Max. Switch Time			
	≤ 20 ms			
Output THDI (@Linear load)				
< 3%				
EFFICIENCY	MPPT Efficiency			
	≥ 99.5%			
	Max. Efficiency			
98.80 %				
Euro Efficiency				
98,30 %				





# TK + A-KOOL

## ALL-IN-ONE ENERGY STORAGE SYSTEM

### Specifications

INVERTER	Inverter Power* see dedicated datasheet for Details	25~100 kW
	Max PV Input Voltage	850 VDC
	Inverter Charging Current	100 ADC
	Inverter AC Output	400 Vac @ 50 Hz
BESS	Max. DoD	90%
	Rated Capacity	107,52 kWh
	Cabinet Max. Slots (Standard)	14 + 2 HVBOX
	Rated Voltage	716.8 Vdc
	Voltage Range	635 ~ 807 Vdc
	Max. Discharge/Charge Current 1C	1C (150 A)
	Recommended Discharge/Charge Current (Long Cycles)	0.5C (75 A)
	System Short Circuit Current	7000 A
	Battery Short Circuit System	6800 A
	HV BOX Fuses Protection	1000 V – 200 A On Both Poles
	HV BOX Manual Breaker	1500 V – 200 A Type C Automatic Thermal Protection
	HV BOX Contactor Rating Current	350 A On Both Poles
CYCLES	Cabinet Max. Elevation	3000 m
	Number Of Cycles 0.5C	≥ 7000 (0.5C, 90% DOD ,70% SOH)
COMMUNICATION	Number Of Cycles 1C	≥ 4700 (1C, 90% DOD, 70% SOH)
	Battery To Inverter Communication	CAN
	AUX Data Communications-Modbus	RS485
	APP Connectivity	WeCo NooR App
BMS PROTECTIONS	Cloud Platform	LAN + 4G
	SOC Alerts	Built-in
	Cell Over - And Under-Voltage Protection	Built-in
	Overload Protection	Built-in
	High Temperature Alarm	Built-in
	External Stop Button (Contactor Disconnection Impulse)	Built-in
	Smoke Alarm	Built-in
PASSIVE PROTECTIONS	Top Windows Pressure Release	Built-in
	Fire Detection Sensor	Built-in
	Fire Fighting System/Gas Suppression Aerosol	Built-in
	DC Protection	Built-in
SHELF-LIFE ENVIRONMENT	Storage Max. Humidity	RH ≤95% (No Condensation)
	Storage Temperature	Less than 3 months: 0 ~ 45 °C (SOC: 20% ~ 50%)
	Shelf Life Without Inspections	> 3 months: 15 ~ 35 °C (SOC: 20% ~ 50%)
	Storage Elevation	≤ 3000 m
BASIC PARAMETERS	Dimensions (W x D x H) (mm)	1140 x 1190 x 2300
	Weight	1650 kg
	Cabinet Design Working Temperature Range	-20 °C +45 °C (Derating due to Defrost Cycles to be considered)
	Recommended Operative Temperature Range	-10 °C +45 °C (Derating ad Defrost Cycles to be considered during operations, could cause power reductions)
	Defrost Coil Resistor For Extreme Low Temperature	220V AC Heating Resistor For Defrosting Function (Optional)
	IP Rating	IP55
	Cooling Method	Heat Pump and Air conditioner
	A/C Stand By Consumption (Inactive Compressor Status Via EMS)	50 W
	A/C Max. Cooling Power	1200 W
	A/C Max. Heating Power	2500 W
	A/C Consumption With Compressor OFF And Fan Running For Air Circulation Only	250 W
	HV BOX Self Consumption	15 W
	HV BOX Consumption With All Fan Running Full Speed	75 W
Energy Saving Programming Mode	Scheduling via EMS for Full Energy Saving	
Coating	Standard Outdoor Painting	
Shipping Method	Batteries to be installed on site	

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## Energy Storage System

Future-proof your home with cutting-edge technology for long-term energy security  
The Next Generation Of Air-Cooled Lithium Battery Cabinets,

