



**ENERGY STORAGE SYSTEM - CABINET  
ESS-TT-KB-60KWH-V2**

*Reliable. Scalable. Efficient.*



Battery Temperature Management



Inbuilt Protection



Including EMS and BMS



Lithium Battery Technology



Compact Design



**ESS-TT-KB-60KWH-V2**

With the ESS-TT-KB-60KWH Storage Cabinet, TommaTech® takes the next step to providing reliable Energy Storage Solutions for everybody. The plug & play outdoor cabinet, which can combine with 50kW hybrid inverter. The 60kWh Lithium-ion battery-bank comes additionally equipped with an EMS and a BMS as well as several inbuilt protection and fire detection systems. For larger projects, the cabinets are extendable up to 500kW inverter power and 3,600kWh storage capacity.



## ESS-TT-KB-60KWH-V2

<b>DC INPUT</b>	
Max. PV Input Power (W)	65000
Max. PV Input Current (A)	36+36+36+36
Rated PV Input Voltage (Vdc)	600
Start Up DC Voltage (Vdc)	180
MPPT Voltage Range (Vdc)	150-850
Max. PV Short-circuit Current (A)	55+55+55+55
Number of MPPT	4
DC injection current (mA)	<0.5%In
<b>AC INPUT &amp; OUTPUT</b>	
AC Output Frequency and Voltage	50 / 60Hz; 3L / N / PE 220 / 380, 230 / 400Vac
Grid Type	Three-phase
AC Output Rated Current (A)	75.8
Power Factor	0.8 leading to 0.8 lagging
THD [%]	<3
<b>BATTERY DATA</b>	
Energy Configuration (kWh)	61.4
Battery Operating Voltage (V)	500 - 700
Max. Charging/Discharging Efficiency [%]	91
Battery Chemistry	Lithium-ion
Battery Module Nominal Voltage (V)	51.2
Battery Module Energy (kWh)	512
BMS Communication	CAN
Battery Module Dimension(W*D*H mm)	440x570x133
<b>EPS OUTPUT (WITH BATTERY)</b>	
Nominal Output Power/UPS Power (W)	50000
Peak Power (off grid)	1.5 times the rated power, 10 s
<b>SYSTEM DATA</b>	
Dimension (W x D x H,mm)	735 x 1050 x 2250 (without an inverter)
Weight Appr. (kg)	950 (Battery) +80 (Inverter)
IP Rating of Enclosure	IP55
Installation Style	Floor-mounted
Warranty [Year]	10
Display	LCD
Operating Temperature Range (C°)	-40 - 60 (>45 loss of efficiency)
Relative Humidity [%]	15 - 85 (non-condensing)
Dimension (W x D x H,mm)	527 x 294 x 894
Inverter Communication	CAN, RS485, WIFI, ETH
Max. Efficiency [%]	97.6
MPPT Efficiency [%]	99.9
Battery Module Weight (kg)	44
Operating Temperature Range [C°]	Charging: 0-55°C / Discharging: -20°C-55°C
Cycle Life	≥6000 (@25°C ± 2°C, 0.5C / 0.5C,70 % EOL)
<b>STANDARD</b>	
Safety EMC / Standard	IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-2, IEC / EN 61000-6-3, IEC / EN 61000-6-4
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS47772, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149 / NBR16150
Battery Module Certification	CE, IEC62619, IEC62040, UN38.3