

VIVAX

Home Energy Storage System EMS-PM-LV-5K01

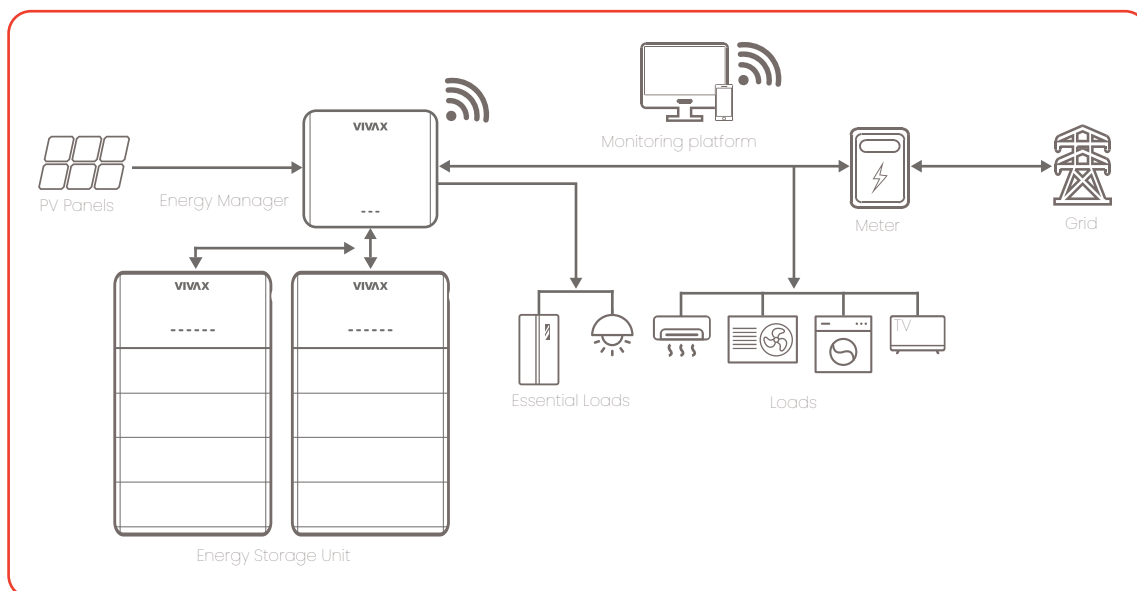
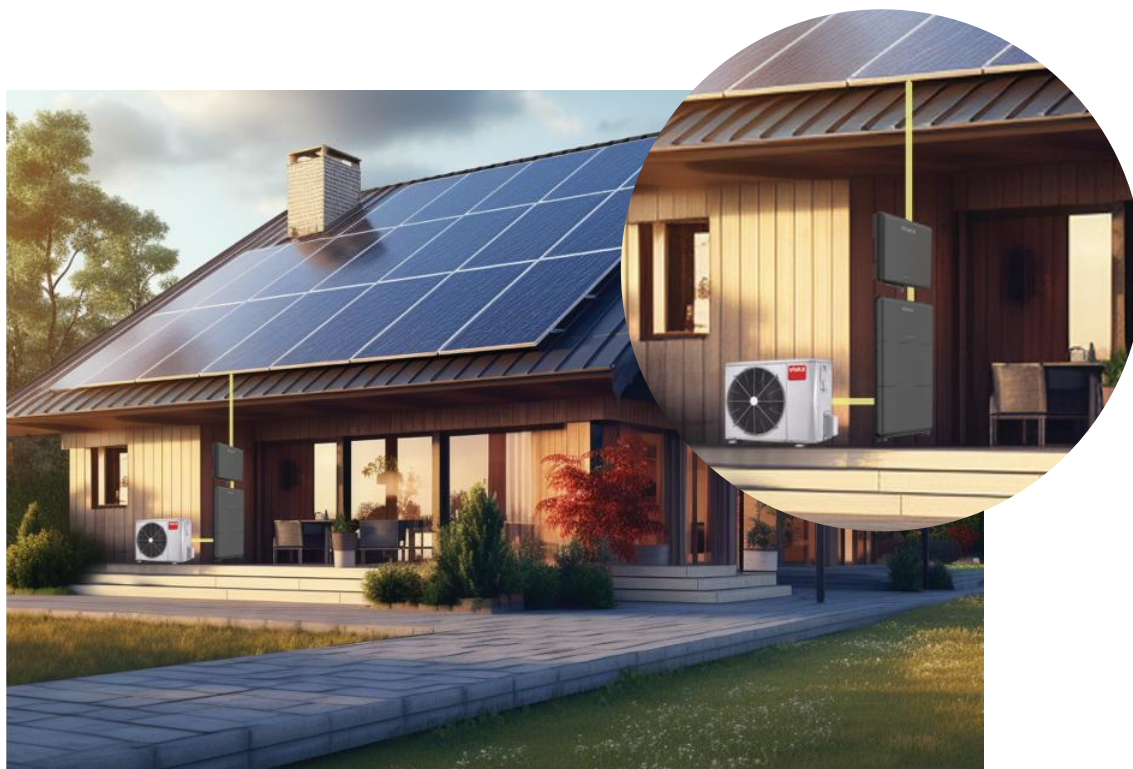
ENERGY MANAGER



POWER MODULE



HEAT PUMP



⚡ HIGHER PRODUCTION

More energy using DC coupled solution architecture that stores PV power directly to the battery without AC conversion losses

🧠 INTELLIGENT MANAGEMENT

More energy using DC coupled solution architecture that stores PV power directly to the battery without AC conversion losses savings

🛡️ SAFETY AND RELIABLE

Electrical isolation and BMS protection functions ensure battery safety

🔧 FLEXIBLE APPLICATION

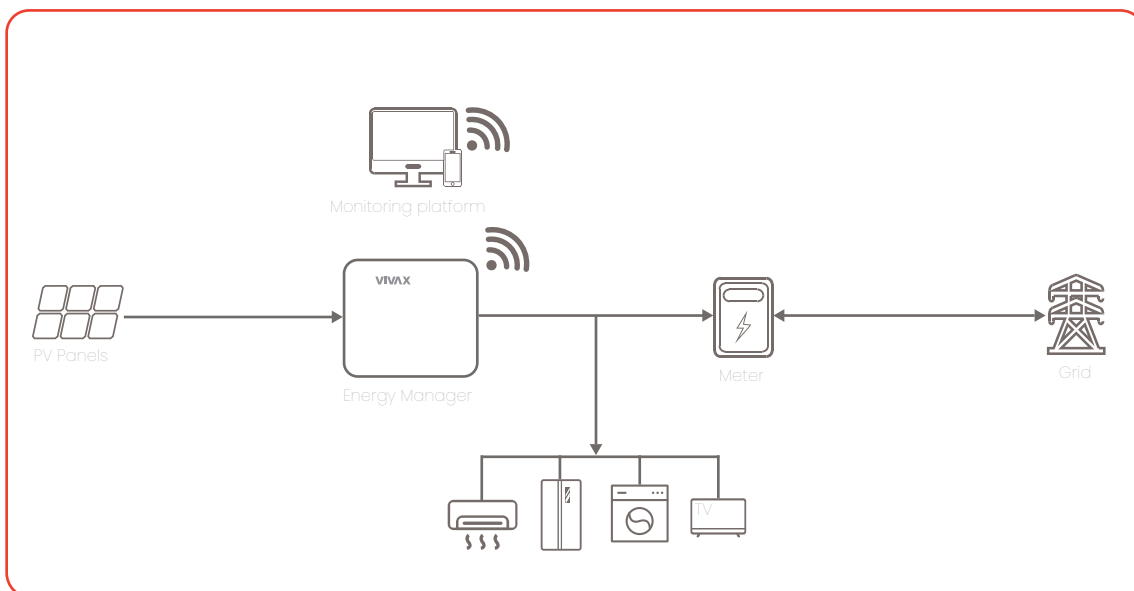
Modular design for easy installation and transportation

System Parameters	ESS 05.1	ESS 10.01	ESS 15.01	ESS 20.01
Number of Bidirectional DC/DC Unit	1	1	1	1
Battery module energy	5kWh	5kWh	5kWh	5kWh
Number of Energy Storage Module	1	2	3	4
Battery usable energy	5kWh	10kWh	15kWh	20kWh
Max. output power	2.5kW	5kW	5kW	5kW
Nominal voltage (three phase system)	600V			
Operating voltage range (three phase system)	600-980V			
Display	SOC status indicator, LED indicator			
Communication	RS485			
Dimension (L*W*H)	690*815*168	690*1223*168	690*1631*168	690*2038*168
	mm	mm	mm	mm
Weight (Floor stand toolkit included)	78.3kg	131.3kg	184.3kg	237.3kg
Installation	Floor standing			
Operating temperature	-20℃ ~ + 55℃ (-4°F ~ 131°F)			
Max. operating altitude	2000m			
Environment	Outdoor/ Indoor 4			
Relative humidity	5%~95%			
Cooling	Natural convection			
Protection rating	IP 65			
Cell technology	Lithium-iron phosphate (LiFePO4)			
Bidirectional DC/DC Unit	EMS-PM-LV-5K01			
Rated charge and discharge power	5kW			
Nominal voltage	600V			
Operating voltage range(three phase system)	600-980V			
Power module Net dimension (L*W*H)	690*168*407mm			
Power module Package dimension (L*W*H)	750*640*320mm			
Power module Net weight	25.2kg			
Power module Gross weight	38kg			
Ingress Protection	IP65			
Energy Storage Module	EMS-BM-LV-5K01			
Nominal Voltage	51.2V			
Voltage Range	45-57.6V			
Max. Continuous Current	50A			
Battery usable energy l	5.12kWh			
Power module Net dimension (L*W*H)	690*165*408mm			
Power module Package dimension (L*W*H)	785*535*285mm			
Power module Net weight	52kg			
Power module Gross weight	58kg			
Ingress Protection	IP66			
Standard				
Certificates	IEC 62477, EN 61000-6-1, EN 61000-6-3, IEC62619, UN38.3,IEC 62040-1, VDE2510-50			

ENERGY MANAGER



Inverter Model		Net Weight/kg	Body Size (L*W*H)/mm	Gross Weight/kg	Packaging Size (L*W*H)/mm
Energy Manager EMS-EM-3P-10K01		33,6	521*247*516	40,4	750*640*320
Power Module EMS-PM-LV-5K01		25,2	690*168*407	38,0	750*640*320
Low voltage Battery Pack EMS-BM-LV-5K01		52,0	690*165*408	58,0	785*535*285



🔧 FLEXIBLE APPLICATION

Battery ready, meet multi-scenarios:
PV installation only , battery added
and battery extension capability

📶 EASY TO MAINTENANCE

Free online monitoring, All
information about PV system is
available anytime and anywhere

⚙️ INTELLIGENT MANAGEMENT

High self-consumption with
optimized built-in energy
management function

🔌 QUICK INSTALLATION

Easy plug and play installation,
touch free commissioning with
smartphone

Model	EMS-EM-3P-10K01
Input (PV)	
Recommended max. PV power (Wp)	15000
Max. input voltage (Vdc)	1000
MPPT operating voltage range (Vdc)	160~800
Start-up voltage(Vdc)	200
Nominal input voltage(Vdc)	600
Max. input current per MPPT(A)	14
Max. short-circuit current (A)	16
Number of MPP trackers	2
Max. input number per MPP tracker	1
Input (Battery)	
Battery Type	Li-ion
Operating voltage range (Vdc)	600~980
Max operating current (A)	16,7
Max charge power (W)	10000
Max discharge power (W)	10000
Output (AC Grid)	
Grid connection	Three phase
Nominal output power (W)	10000
Max. apparent power (VA)	11000
Nominal output voltage(Vac)	220/380, 230/400, 3/ N/PE
Nominal AC grid frequency (Hz)	50/60
Nominal output current (A)	14,5
Max. output current (A)	16
Adjustable power factor	0.8 leading~0.8 lagging
Max. total harmonic distortion	3≤%
Output (AC backup)	
Maximum apparent AC power(VA)	10000
Output voltage(Vac)	220/380, 230/400, 3/ N/PE
Max. output current (A)	14,5
Switching to backup mode	<3s
Efficiency	
Max. efficiency	97,6%
Protections & Features	
Input-side disconnection device	Yes
Anti-Islanding protection	Yes
DC reverse polarity protection	Yes
Insulation monitoring	Yes
Residual current monitoring	Yes
AC overcurrent protection	Yes
AC short-circuit protection	Yes
AC overvoltage protection	Yes

LVRT	Yes
Energy Management	Yes
Black start	Yes
Back-up power	Yes
Efficiency	
Max. efficiency	97,6%
Protections & Features	
Input-side disconnection device	Yes
Anti-Islanding protection	Yes
DC reverse polarity protection	Yes
Insulation monitoring	Yes
Residual current monitoring	Yes
AC overcurrent protection	Yes
AC short-circuit protection	Yes
AC overvoltage protection	Yes
LVRT	Yes
Energy Management	Yes
Black start	Yes
Back-up power	Yes
General Data	
Operating temperature range	- 25°C~ +60°C
Relative operating humidity	0 %RH-100 %RH
Max. operating altitude	2000m
Cooling	Natural convection
Display	LED indicators; integNominal WLAN + APP
Communication	RS485, WLAN
Net Weight (kg)	33,6
Gross Weight (kg)	40,4
Body Dimension (L*W*H)(mm)	521*247*516
Package Dimension (L*W*H)(mm)	750*640*320
Degree of protection	IP65
Standard Compliance	
EMC	EN 61000-6-1,EN 61000-6-3,EN 62920
Safety	IEC62109-1, IEC62109-2
Grid	EN 50549-1, VDE-AR-N 4105