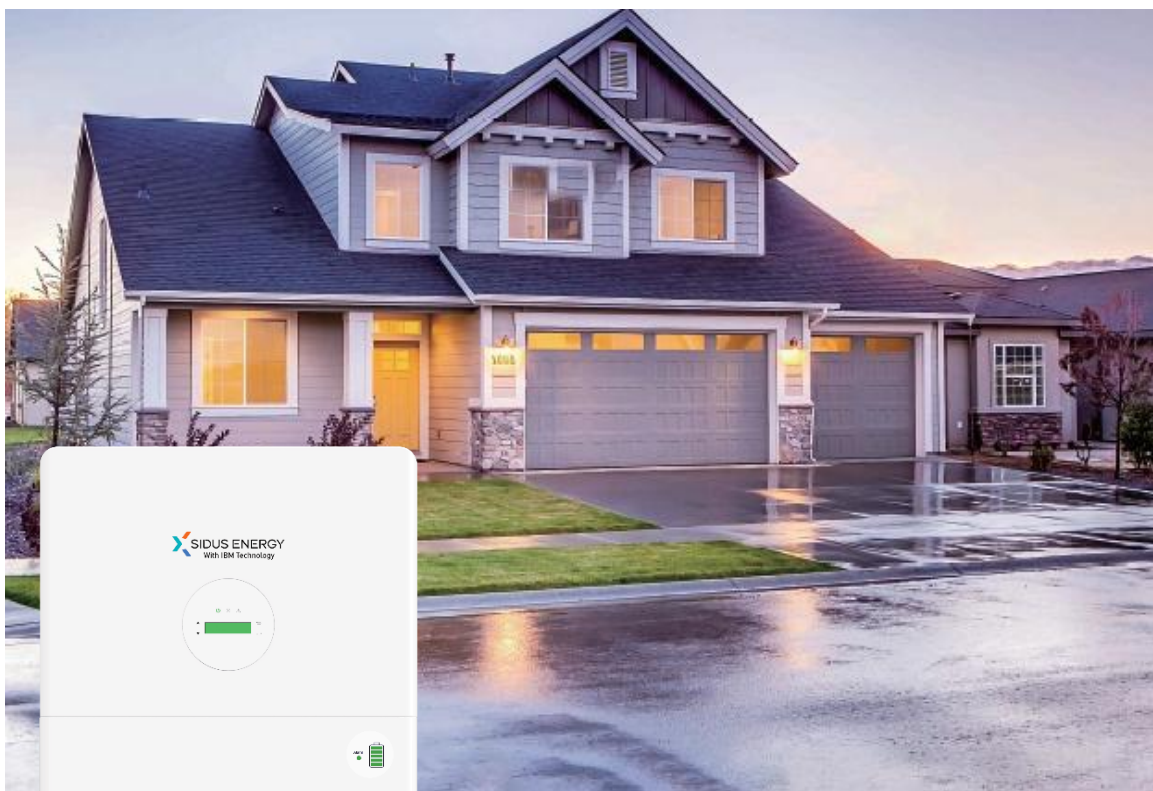


NEO Tota

All-in-One Three Phase ESS for EU Home Application



AFCI Standard



RSD Ready
VPP Ready



IP66 Outdoor Design



Modular Design
Plug & Play



Scalable Design Up
To 25.6kWh



UPS function
switch time $\leq 10\text{ms}$

FOR SOLAR + ENERGY STORAGE SYSTEM

POWER: 3 / 4 / 5 / 6 / 8 / 10 / 12 / 15 kW

BATTERY CAPACITY: 7.68kWh - 25.6kWh

Sidus AF Series is an all-in-one solar and storage solution that integrates the inverter, battery charger, UPS-level switching, and battery enclosure into a pre-wired modular system for easier and faster installation. The compact, elegantly designed, and robust unit is IP66 rated, so it can be mounted either inside or outside withstanding all weather conditions and brings a reduction of installation time of up to 50%.

NEO Tota Inverter Technical Data

Model	SHE-AF3K	SHE-AF4K	SHE-AF5K	SHE-AF6K	SHE-AF8K	SHE-AF10K	SHE-AF12K	SHE-AF15K	
PV Input									
Max DC Input Power (kW)	5	6	7.5	9	12	15	18	22.5	
DC Input Voltage Range (V)	150-1000								
MPPT Voltage Range (V)	150-850								
Start-up Voltage (V)	160								
Max DC Input Current (A)	20 x 2								
Max Short Current (A)	30 x 2								
No. of MPPT Tracker/Strings	2 / 2								
Battery Input									
Battery Nominal Voltage (V)	150	200	200	250	300	350	450	500	
Battery Voltage Range (V)	80-600								
Max Charge/Discharge Current (A)	30								
Max Charge/Discharge Power (kW)	3	4	5	6	8	10	12	15	
Compatible Battery Type	Li-ion / Sodium-ion / LFP								
AC Grid									
Nominal AC Output Power (kW)	3	4	5	6	8	10	12	15	
Max AC Output Current (A)	5.3	7	8.5	10.5	13.5	17	21.5	27	
Nominal AC Voltage (V)	230 / 400								
Nominal AC Frequency (Hz)	50 / 60								
Power Factor	1 (-0.8 to +0.8) adjustable								
Current THD	<3%								
AC Load Output (Backup)									
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000	12000	15000	
Nominal Output Voltage (V)	230 / 400								
Nominal Output Frequency (Hz)	50 / 60								
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5	17.4	21.8	
Peak Output Power (60s)	3300VA	4400VA	5500VA	6600VA	8800VA	11000VA	13200VA	16500VA	
THDV (with linear load)	< 3%								
Switching Time (ms)	≤ 10								
Efficiency									
Europe Efficiency					97.5%				
Max Efficiency	98.0%				98.2%		98.3%		
Bat. Charge/Discharge Eff.					98.0%				
Protection									
Reverse Polarity Protection					Yes				
Over Current/Voltage					Yes				
Anti-islanding					Yes				
AC Short-circuit					Yes				
Leakage Current Detection					Yes				
Ground Fault Monitoring					Yes				
Grid Monitoring					Yes				
Enclosure Protect Level					IP66				
AC/DC Surge Protection					Type II				
General Data									
Dimensions (W x H x D, mm)					600 x 432 x 210				
Weight (kg)					25				
Topology					Transformer less				
Cooling Concept	Natural Convection				Intelligent Fan				
Relatively Humidity					0-100%				
Operating Temp. Range (°C)					-25 to 60				
Operating Altitude (m)					<4000				
Standby Consumption (W)					<5				
Display & Comm. Interfaces	LCD, LED, RS485, CAN, WIFI, GPRS, 4G								
Cert. & Approvals	NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2, EN61000-6-2, EN61000-6-3								

NEO Tota Battery Technical Data

Inverter		3 Packs	4 Packs	5 Packs	6 Packs	7 Packs	8 Packs	9 Packs	10 Packs
BMS									
Battery		7.68kWh	10.24kWh	12.8kWh	15.36kWh	17.92kWh	20.48kWh	23.04kWh	25.6kWh

Model	SER-HVL
Parameter	
Nominal Voltage (Vdc)	51.2
Nominal Capacity (Wh)	2560
Working Voltage Range (Vdc)	129.6-516.6
Charge Voltage (Vdc)	56.16
Nominal Charge/Discharge Current(A)	25
Max. Charge/Discharge Current(A)	50
Peak Current(A)	100@3sec
Series Connection	3-10 pcs
Cycle Life	6000 @ 80% DOD, 25°C / 0.5C
Structure	
Power Module Dimensions(mm)/Weight(kg)	600*210*250 /14
Battery Module Dimensions(mm)/Weight(kg)	600*210*160 /27
Lampstand Module Dimensions(mm)/Weight(kg)	600*210*90 /5
Top Cap Module Dimensions(mm)/Weight(kg)	600*210*50 /2.5
IP Rating	IP65
Installation	Stacked
Working Environment	
Charge Working Temperature(°C)	0-55
Discharge Working Temperature(°C)	-20~60
Altitude (M)	<2500
Humidity (RH)	5-95% (w/o condensing)
Communication	
Communication Port	RS485, CAN
Display	SOC status indicator, LED indicator
Certification	
CB, IEC62619, CE-EMC, CE-GPSP, UKCA, UL1973, UL9540A, EN62040, IEC62040; UN38.3, MSDS	