Voltsmile Flex120k

All-in-One Hybrid Power Hub
*Seamlessly combines hybrid solar, battery storage and **diesel generator** into one unified system.*

Outdoor Durability
*IP54-rated dustproof and water-resistant enclosure for **all environment** operation.*

Triple-Layer Fire Protection
*Integrates **water-based, aerosol and venting systems** for comprehensive safety.*

www.voltsmile.com

Flex120K All-in-One Solution

Single Cabinet Options: 72/96/120kWh
Supports Multi-cabinet Expansion up to 480kWh

Model	FLEX120-40P	FLEX120-50P	FLEX120-60P
BAT			
Normal Capacity	314Ah 24S*1P 3PCS	314Ah 24S*1P 4PCS	314Ah 24S*1P 5PCS
Nominal Energy	72.345kWh	96.46kWh	120.57kWh
Nominal Voltage	230.4V	307.2V	384V
Normal Charge Voltage	259.2V	345.6V	432V
Charging End-off Current	5A		
Standard Charging Method	0.5C(157A) 10-55°C		
Maximum Continuous Charging Current	0.6C(188A) 10-55°C		
Standard Discharging Method	0.5C(157A) 10-55°C		
Maximum Continuous Discharge Current	0.6C(188A) 10-55°C		
End of Discharge Voltage	194.4V	259.2V	324V
PV			
Maximum Input Power(PV)	80kW	100kW	108kW
Mppt Operating Voltage Range	150V-900V		
Maximum Input Current	40A*4		
Number of MPPTs	4		
Grid			
Rated Voltage	380V/400V, 3P+PE(+N)		
Rated Input Power	80kW	100kW	120kW
Rated Input Current	121.6A/115.5A	152A/144.4A	182.4A/173.2A
Rated Output Power	40kW	50kW	60kW
Rated Output Current	60.8A/57.7A	76A/72.2A	91.2A/86.6A
Overload Capacity	110% Long-term		
Gen			
Rated Voltage	380V/400V, 3P+PE(+N)		
Rated Input Power	80kW	100kW	120kW
Rated Input Current	121.6A/115.5A	152A/144.4A	182.4A/173.2A
Load			
Rated Voltage	380V/400V, 3P+PE(+N)		
Rated Frequency	50/60Hz		
Maximum Output Power	40kW	50kW	60kW
Rated Output Current	60.8A/57.7A	76A/72.2A	91.2A/86.6A
Overload Capacity	110% long-term		
Switching time	≤10ms		
General Data			
Maximum efficiency	98%		
Cycle Life	≥6000 cycles		
Communication method	Ethernet / RS485 / CAN / 4G (optional) / Wi-Fi(optional)		
Working temperature	-40°C to 60°C (de-rated above 45°C)		
Work humidity	0%~95%RH		
Working altitude	4000m (> 2000m reduced value)		
Over voltage level	II (DC side), III (AC side)		
Size (mm)	860*1200*1600	860*1200*1850	860*1200*2100

Flex120K All-in-One vs. Traditional Solutions

Flex120K All-in-One ESS
- *Integrated design for fast and simple setup, ready to use;*
- *Compact structure saves valuable space;*
- *Rugged build for diverse environments;*
- *Intelligent energy management and optimization;*
- *Flexible expansion to meet growing needs.*

VS

Traditional Diesel Generator
- *High and volatile fuel costs;*
- *Significant noise and emissions issues;*
- *Power interruption during startup;*
- *Frequent maintenance and high upkeep costs;*
- *Lacks intelligent monitoring and management features;*

Traditional C&I Split System
- *Split design increase installation complexity;*
- *Requires extensive on-site wiring, raising labor and time costs;*
- *Overall system occupies more physical space;*
- *Involves maintaining and managing two separate units;*
- *Demands professional expertise for setup and integration.*

Stackable Battery-Only System
- *Energy storage unit only, requires additional equipment;*
- *Limited functionality and application scope;*
- *Complex system compatibility and commissioning;*
- *Total cost of ownership is difficult to control;*
- *Hard to upgrade to a hybrid energy system.*

Flex120K All-in-One ESS Usage scenario