



Wind&Solar&Diesel Smart Distributed ESS

ESN 50 features an All-in-One design, consisting of 7 air-cooling battery packs, a 50kW hybrid inverter, a BMS, an EMS, an smart temperature control system, a precision suppression and explosion-proof combined fire protection system, as well as cabinet structure and electrical auxiliary equipment, with a battery rated capacity of 150.5 KWh.



Safety

Smart warning ensures energy storage safety and precise temperature control extends product life by **12%**.



Simple

Occupying only 2.72m of floor space, modular deployment enables rapid installation, while prefabricated components save **15%** in costs.



Smart

Cloud-based smart operation and maintenance, AI-enabled remote monitoring and early warning ensure the full lifecycle of batteries, while multi-mode switching increases revenue.



Expansive

Hand-in-hand parallel expansion, covering a wide power range from **50kw** to **300kw**.

Model		ESN-DS5T0150-PVW50A
Wind Power Input (optional)	Rated input power/Max.power	10kW/20kW
	Rated input voltage/range	380Vac/0~600Vac
	Operating mode	MPPT
	MPPT voltage range	260~600Vac
	Input protection	Fuse; Lightning protection circuit
	Unloading mode/Max.unloading current	PWM/200Adc
PV Input	Max.input power	50kW
	tarting voltage	200V
	Max.DC input voltage	1000Vdc
	Rated DC input voltage	630Vdc
	MPPT voltage range	200-850Vdc
	Qty.Of MPPT	4
	Qty.ofsingle-channel MPPT inputchannels	2
	Max.input current	30A*4
	Max.short circuit current	40A*4
Diesel Generator Input	Rated input power	50kW
	Input voltage	380Vac
	Input current	75A
ESS	Rated energy	150.5 KWh
	Rated capacit	280Ah
	Rated voltage	537.6Vdc
	Battery voltage range	470.4~604.8 Vdc
	Rated charge/discharge current	90A
	Max.charge/discharge current	100A
Machine AC Output	Rated output power	50kW
	Max.output current	75A
	Ratedvoltage(Input and output)	3L/N/PE;380V
	Grid frequency	50Hz/60Hz
	THDu	<3%@rated power &linear load
	Maximum PVconversion efficiency	98.8%
	System Parameters	Weight
Dimensions		1600*1700*2591(W*D*Hmm)
Ingress protection		IP54
Anticorrosive level		C4
Communication mode		RS485,Ethernet,4G
Operating temperature		-30℃~55℃ (45℃ derating)
Storage temperature		-20℃~45℃ (SOC30% ~ 50%, <6months)
Relative humidity		5~95%,no condensing
Altitude		3000m(>2000m derating)
Cooling mode		Smart air conditioner &fan
Battery certification		GB/T36276、UN38.3
Inverter certification		IEC61000、IEC62109、IEC62477-1、EN50549-1