

DYNE

3.6-5.0-6.0-8.0L-1P-A

The DYNE 3.6/5.0/6.0/8.0L-1P-A series is designed for residential hybrid systems. The inverter can work with Dyness low-voltage lithium-ion battery DL5.0X/DL5.0C/ Powerbox Pro to maximize self-consumption and provide backup power if the grid fails and there is not enough PV power to cover load demand.



Generator Connectivity

Generator connectivity with multiple input methods and automatic generator On/Off control



Customizable Settings

6 customizable charge/discharge time settings, Up to 135A(3.6/5.0/6.0K) and 190A(8.0K) max charge/discharge current



No Black Out

Automatic UPS switching <4ms, Ensuring the stability of household electricity consumption



Surge Power Backup Capability

10 seconds 200% surge power backup overload capability



Peak Shaving Control

Supports peak shaving control in both "self-use" and "generator" mode



Flexible Connection

Supports 1ph and 3ph flexible connection

Model	3.6L-1P-A	5.0L-1P-A	6.0L-1P-A	8.0L-1P-A
Input DC (PV side)				
Recommended max. PV power	5.76 kW	8 kW	9.6 kW	12.8 kW
Max. input voltage	600 V			
Rated voltage	330V			
Start-up voltage	90V			
MPPT voltage range	90 – 520 V			
Max. input current	16 A / 16 A			32A/20A
Max. short circuit current	24 A / 24 A			36A/30A
MPPT number/Max. input strings number	2/2			2/3
Battery				
Battery type	LiFePO ₄			
Battery voltage range	40 – 60 V			
Max. charge/discharge power	3.6 kW	5 kW	6 kW	8 kW
Max. charge/discharge current	80 A	112 A	135 A	190 A
Communication	CAN / RS485			
Output AC (Grid side)				
Rated output power	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	4 kVA	5.5 kVA	6.6 kVA	8.8 kVA
Operation phase	1 / N / PE			
Rated grid voltage	220 V / 230 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. output current	20 A	25 A	30 A	40 A
Power factor	>0.99 (0.8leading – 0.8lagging)			
Input AC (Grid side)				
Input voltage range	187–253 V			
Max. input current	25 A	32 A	40 A	50 A
Frequency range	45–55 Hz/55–65 Hz			
Output AC (Back-up)				
Rated output power	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	2 times of rated power, 10s			
Back-up switch time	<4ms			
Rated output voltage	1/N/PE, 220 V/230 V			
Rated frequency	50 Hz/60 Hz			
Max. output current	20 A	25 A	30 A	40 A
THDv (@linear load)	<2%			
Efficiency				
Max. efficiency	>96.9%			
EU efficiency	>96.5%			
Protection				
DC reverse-polarity protection	Yes			
Ground fault monitoring	Yes			
Integrated AFCI(DC arc-fault circuit protection)	Yes			
Protection class/Over voltage category	I/II (PV and BAT), III (MAINS and BACKUP and GEN)			
General Data				
Dimensions(W/H/D)	406/560/205mm			406/560/215 mm
Weight	24 kg			26kg
Topology	High frequency isolation (for battery)			
Operating ambient temperature range	– 40 – 60 °C			
Ingress protection	IP66			
Cooling concept	Natural convection		Intelligent redundant fan-cooling	
Max.operation altitude	4000m			
Certification & Standard	NRS 097–2–1, IEC/EN 62109–1/–2, IEC/EN 61000–6–1/–2/–3/–4			
Features				
DC connection	MC4 plug (PV port)/ Terminal Block (BAT port)			
AC connection	Terminal Block			
Display	LED + APP			
Communication	RS485, CAN, Optional: Wi-Fi, LAN			

