



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 with multiple input methods and automatic generator On/Off control
- ◆ Automatic UPS switching(<4ms)
- ◆ Supports peak shaving control in both "self-use" and "generator" mode
- ◆ Up to 135A(3.6/5.0/6.0K) and 190A(8.0K) max charge/discharge current
- ◆ 6 customizable charge/discharge time settings
- ◆ 10 second 200% surge power backup overload capability
- ◆ Supports 1ph and 3ph flexible connection with max 36kW (3.6/5.0/6.0K) and 48kW(8.0K) in parallel

Datasheet

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	8 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	Li-ion			
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				
Output AC (Grid side)				
CAN / RS485				
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	3000m			
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			
Warranty	10 years*			

*The warranty will be limited to 5 years if not connected with Dyness batteries.