

CSE AIO1-G1 Series Datasheet	
Date	17/12/2024
	Manufacturer Information
Name	CSE Energy & Technology Co., Ltd.
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PCS Module	AI01-3K-G1	AI01-5K-G1/AI01-5K-G1-L
PV Input Data		
Max. Input Power (Wp) @ STC	4500	10000
Max. Input Voltage (V)	600	
MPPT Voltage Range (V)	120-550	
MPPT Startup Voltage (V)	120	
MPPT Max. Input Current (A)	13.5	
MPPT Max. Short-Circuit Current (A)	15	
No. of MPPT	2	
No. of PV Strings Per MPPT	1	
PV Interface	MC4	
AC Output Data (Grid On)		
Rated output apparent power (VA)	3000	5000
Rated Power (W)	3000	5000
Max. Power (VA)	3000	5000
Rated Current @ 230Vac (A)	13.1	21.7
Max. Current (A)	13.6	22.7
Rated Voltage/Range (V)	230/180-280	
Rated Output Frequency	50/60Hz	
Power Factor (cos ϕ)	From 0.8 leading to 0.8 lagging	
Phase	Single (L+N+PE)	
Max. output fault current	25.73A	42A
Max. output over current protection	18.2A	29A
THDi%	<3%	
AC Input Data		
Rated input voltage (V)	230V	
Max.input current (A)	27.3A	42A
Rated Input Frequency	50/60Hz	
AC Output Data (Back-up)		
Rated Output Power (VA)	3000	5000
Peak Output Power (VA)	3600 @10s	6000 @10s
Rated Output Voltage/Range (V)	230/180-280	
Rated Output Frequency/Range (Hz)	50/60	
Max. Output Current (A)	13.6	22.7
THDv%	<3%	
Battery Data		
Type of Battery	LiFePO ₄	
Rated Input Voltage (V)	51.2	
Battery Voltage Range (V)	42-58.5	
Max. Charge/Discharge Current (A)	50/50	100/100

Depth of Discharge	87% Default (0~100% Adjustable)	
Module Number	1	1-4
Energy (kWh)	5.12	5.12-20.48
Max. Efficiency	96.90%	
European Efficiency	96%	
Max. Battery Discharge Efficiency	94%	
Communication Interface	CAN/RS485	
Battery Power Interface	IP 65 Plug	
General Data		
Dimensions (W mm * D mm * H mm)	730*205*932	730*205*(932*Pack No.)
Weight (kg)	85.3	133.8/182.3/230.8
Ingress Protection	IP 65	
Noise (dBA)	<29	
Over Voltage Category I(AC), I (DC)	III(AC),II(DC)	
Protection Class	I	
Pollution Class	PD2 (inside), PD3 (Outside)	
Self-consumption at Night (W)	<10	
Operating Temperature Range (°C)	-10 to 55 (45 to 55 derating)	
Relative Humidity (RH)	0-95%, Non-condensation	
Altitude (m)	≤3000	
Installation	Stacked Ground-mounted	
AC Short-circuit Protection	Integrated	
Overload Protection	Integrated	
Residual Current Detection	Integrated	
Battery Reverse Protection	Integrated	
Anti-island Protection	Integrated(RoCof)	
AC Surge Protection	Integrated	
DC Surge Protection	Integrated	
DC Over/Under-voltage Protection	Integrated	
AC Over/Under-voltage Protection	Integrated	
AC Over/Under-frequency Protection	Integrated	
Valley Peak Time Setting	Integrated	
Ground Fault Monitoring	Integrated	
PV Circuits of DVC	DVC-C	
Battery Circuits of DVC	DVC-B	
Control Circuits of DVC	DVC-C	
AC Mains/Grid Circuits of DVC	DVC-C	
Backup Circuits of DVC	DVC-C	
Communication Circuits of DVC	DVC-A	