YOUR
SMART
ENERGY

up to >12% Additional energy use

up to >20% Longer service life

SMILE-G3-S10

HOME SERIES

POWER

Hybrid Single Phase 10 kW



ALPHALINX TECH

Optimal capacity utilization through pack balancing

Intelligent Bypass for continuous operation

Flexible system capacity expansion

HYBRID INVERTER

Max. 15A PV input current per string, 2 MPPTs for flexible roof

Dynamic tariff scheduling to maximize savings and benefits

Support AFCI function to protect the system against arc falt

SMILE-G3-S10

Model	SMILE-G3-S10
DC Side (PV Input)	
Max. Input Power [w]	10000
Max. Input Voltage [Vdc]	580
Norminal Input Voltage [Vdc]	360
No. of MPPTs / Strings per MPPT	2 / 1
MPPT Voltage Range [Vdc]	100 ~ 550
Start-Up Voltage [Vdc]	120
Max. Input Current per MPPT [A]	15
Max. Short-Circuit Current per MPPT [A]	22.5
Battery Connection	
Battery Port DC Voltage Range [Vdc]	80 ~ 467.2
Max. Charge / Discharge Current [A]	60 / 60
Max. Charge / Discharge Power [W]	10000 / 10000
Compatible Battery Model	SMILE-G3-BAT-9.3S
Battery Modules per Inverter	1 to 4
AC Side (Grid Port)	
Max. Input Power [W]	11500
Max. Input Apparent Power [VA]	11500
Nominal Output Power [W]	9999
Rated Output Apparent Power [VA]	9999
Rated Output Current [A]	43.4
Max. Output Current [A]	45.4
Rated Grid Frequency [Hz]	50 / 60
Rated Grid Voltage [V]	220 / 230
Displacement Power Factor	0.8 cap ~ 0.8 ind
Total Harmonic Distortion (THDi, Nominal Output)	<3%
AC Side (Backup Port)	
Rated Output Apparent Power [VA] On-Grid	9999
Rated Output Apparent Power [VA] Off-Grid	10000
Rated Output Current [A]	43.4
Peak Output Power [W] (105% for 30s / 110% for 1s)	10500 / 11000
Peak Output Current [A]	45.6 / 47.8
Backup Switching Time [ms]	<20
Protection	
Overvoltage Category	BAT, PV II; Grid, Backup III
Active Anti-Islanding Method	Active Frequency Drift
Integrated DC Switch	Yes
Safety Protection Features	Insulation Resistance Protection, Surge Protection (DC Type II / AC Type II), Over-Temperature Protection, Islanding Protection, AC Over-Voltage Protection, Overload Protection, AC Short-Circuit Protection
Certifications & Compliance	
EMC Standards	IEC 61000-6-1/2/3/4, IEC 61000-3-11/12
Certification	AS/NZS 4777.2:2020+A1:2021+A2:2024, IEC62109
Ingress Protection (IP) Rating	IP66
Protection Class	Class I
General Information	
Max. Inverter Efficiency [%]	97.3 (PV-AC)
Weight [kg]	20.5
Dimensions (W x H x D) [mm]	610 x 366 x 212
Max. Operating Altitude [m]	3000
Cooling Method	Fan Cooling
Topology	Transformerless
Noise Emission (Typical) [db]	<30 (Fan Inactive); <45 (At Maximum Fan Speed)
Operating Temperature Range	-25 ~ 60
Relative Humidity	0 ~ 100% (Non-condensing)
Comminication Interfaces	CAN, RS485, DRM/RRCR, Wi-Fi, LAN (Optional)
Warranty	10 Years
Country of Manufacture	China

V1.0.16092026 I Text and images correspond to the current state of technology at the time of printing. Subject to modifications. All information is without guarantee in spite of careful editing - liability excluded.

Alpha ESS Australia Pty. Ltd.
australia@alpha-ess.com
+61 02 90007676
www.alphaess.au
31 Richmond Rd, Homebush West NSW 2140