



• YOUR
• SMART
• ENERGY

SMILE-T10-HV

RESIDENTIAL SERIES

CAPACITY ▶

8.2 kWh modular
expandable to 49.2 kWh



UPS ability

Modular design

24/7 Monitoring

More PV Generation



SMILE-T10-HV



Model		SMILE-T10-HV
System Specification		
Nominal Output Power	10000 W	
Capacity Range	8.2 ~ 49.2 kWh (95% DoD)	
Battery Chemistry	LFP (LiFePO4)	
IP Protection	IP65 (Outdoor)	
Warranty	5 Year Product Warranty, 10 Year Performance Warranty	

Inverter Technical Specification			
Model	SMILE-T10-HV-INV	Rated Voltage	380 / 400 V (3 phase)
Max. PV Input Power	16000 W	Rated UPS Output Current	14.5 A
Max. PV Input Current	2 x 26 A	Rated UPS Output Power	10000 VA
Max. PV Input Voltage	1000 V	Communication	Ethernet / WiFi / 4G
MPPT Number/ Max. input strings number per MPPT	2/2	Start Up Voltage	160 V
MPPT Voltage Range	200 ~ 850 V	Humidity	15% ~ 85% (No Condensing)
Max. PV Short-circuit Current	2 x 39 A	Dimension (W x D x H)	580 x 230 x 606 mm
Max. Charging / Discharging Current	40 A	Weight	30 kg
Rated AC Output Power	10000 VA	Rated AC Output Current	14.5 A
Rated Frequency	50 / 60 Hz	Max. Efficiency	>98.4%
Grid Regulation	AS4777, CEI0-21, G99, G100, NRS, EN50549, PEA		

Battery Technical Specification	
Module Model	SMILE-BAT-8.2PH
Module Capacity	8.2 kWh
Usable Capacity	7.8 kWh
Depth of Discharge (DoD)	95%
Nominal Voltage	256 V
Max. Charging/Discharging Current	38.4 A
Operating Temperature Range	-10 °C ~ 50 °C*
Cycle Life	10000**
Battery Modules Connection	1 ~ 6 in parallel

* When the temperature is below 0 °C or above 40 °C, the performance will be limited.

** Under specific test conditions

Made in China



Headquarter: Alpha ESS Co., Ltd.

☎ +86 513 8060 6891
✉ info@alpha-ess.com
🌐 www.alpha-ess.com
📍 Jiuhua Road 888, Nantong High-Tech Industrial Development Zone, Nantong City, 226300

Alpha ESS Suzhou Co., Ltd.

☎ +86 512 6828 7609
✉ info@alpha-ess.com
🌐 www.alpha-ess.com
📍 Building 10-A, Canal Town Industrial Park, 99 Taihu E Rd, Wuzhong District, Suzhou 215000

Australia: Alpha ESS Australia Pty. Ltd.

☎ +61 402 500 520 (Sales)
+61 1300 968 933 (Technical Support)
✉ australia@alpha-ess.com
🌐 www.alpha-ess.com.au
📍 Unit 1, 2 Ralph Street Alexandria NSW 2015

Germany: Alpha ESS Europe GmbH

☎ +49 610 3459 1601
✉ europe@alpha-ess.de
🌐 www.alpha-ess.de
📍 Paul-Ehrlich-Straße 1a, D-63225 Langen, Hessen

Italy: Alpha ESS Italy S.r.l.

☎ +39 599 239 50
✉ info@alpha-ess.it
🌐 www.alpha-ess.it
📍 Via Loda, 17-41013 Castelfranco Emilia (MO)

Korea: Alpha ESS Korea Co., Ltd.

☎ +82 64 721 2004
✉ korea@alpha-ess.com
📍 2F, 19-4, Nohyeong 11-gil, Jeju-si, Jeju-do, Republic of Korea

UK: Alpha ESS UK Ltd.

✉ uk@alpha-ess.com
📍 Drake House, Long Street, Dursley, gl11 4hh