



YOUR
SMART
ENERGY



SMILE-T10-HV

RESIDENTIAL SERIES

POWER

10 kW

CAPACITY

8.2 kWh Battery Module
Expandable to 49.2 kWh



Modular Design

UPS Ability

High Voltage & High Efficiency

Three-Phase Output

160% PV Input

SMILE-T10-HV



Model	SMILE-T10-HV
System Specifications	
Nominal Output Power	10 000 W
Capacity Range	8.2 ~ 49.2 kWh (95% DoD)
Battery Chemistry	LFP (LiFePO ₄)
IP Protection	IP65 (Outdoor) / IP21 (Indoor)
Warranty	5 Years Product Warranty, 10 Years Battery Performance Warranty

Inverter Technical Specifications			
Model	SMILE-T10-HV-INV	Rated Voltage	380 / 400 V
Max. PV Input Power	16000 W	Phase	Three Phase
Max. PV Input Current	2 x 26 A	Backup	UPS
Max. PV Input Voltage	1000 V	Communication	Ethernet / WiFi / 4G
MPPT Number / Max. Input Strings Number per MPPT	2 / 2+1	Start-Up Voltage	160 V
MPPT Voltage Range	200 ~ 850 V	Relative Humidity	15% ~ 85% (No Condensation)
Max. PV Short-Circuit Current	2 x 39 A	Dimensions (W x D x H)	580 x 230 x 606 mm
Max. Charging/ Discharging Current	40 A	Weight	30 kg
Max. Charging/ Discharging Power	10000 W	Safety	IEC 62109, IEC 62040
Rated Frequency	50 / 60 Hz	EMC	EN61000-6-1/-2/-3/-4
Grid Regulations	VDE 4105, EN 50549, C10/11, NC RfG, G99, TOR Erzeuger, AS 4777.2, PEA, UNE_217002, VDE 0126		

Battery Technical Specifications	
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	32 A
Operating Temperature Range	-10°C ~ 50°C**
Cycle Life	10000***
Battery Modules Connection	1 ~ 6 in Parallel

* Test condition: Max. 0.5C charge/discharge at 25±2°C.

** Max. charge/discharge current derating may occur with changes in temperature and SoC.

*** Under specific test conditions.



Alpha ESS Co., Ltd.

+86 513 8060 6891
 info@alpha-ess.com
 www.alphaess.com

Jiuhua Road 888, Nantong High-Tech Industrial Development Zone, Nantong, Jiangsu Province, China

Alpha ESS Europe GmbH

+49 610 3459 1601
 europe@alpha-ess.de
 www.alphaess.de

Paul-Ehrlich-Str. 1a, Langen, Hessen D-63225 Germany

Alpha ESS Australia Pty. Ltd.

+61 02 9000 7676
 Australia@alpha-ess.com
 www.alphaess.com

8/15-21 Gibbes Street, Chatswood, NSW 2067 Australia

Alpha ESS International Pte. Ltd.

+65 6513 1125 / +65 6513 1126
 Singapore@alpha-ess.com
 2 Corporation Road #01-06A Corporation Place 618494 Singapore

Alpha ESS Italy S.r.l.

+39 339 462 4288
 info@alpha-ess.it
 www.alphaess.com
 Via Don Minzoni, 17, Calenzano Firenze 50041 Italy

Alpha ESS UK Ltd.

+44 145 354 5222
 info@alpha-ess.com
 Drake house, Long street, Dursley, gl11 4hh UK

Alpha ESS USA, Inc.

+1 408 368 7828
 usa@alpha-ess.com
 Unit 5 2180 S Ivanhoe St, Denver, CO 80222 USA

Alpha ESS Korea Co., Ltd.

info@alpha-ess.com
 2F, 19-4, Nohyeong 11-gil, Jeju-si, Jeju-do, Republic of Korea