

Residential Low-Voltage Stackable Battery

HTDESS LP5.12×1/2/3/4 IRD1



Product Features

Modular Stacking Design

Supports free combination of 1 to 4 battery packs, flexible capacity expansion to meet different household electricity needs.

Strong Environmental Adaptability

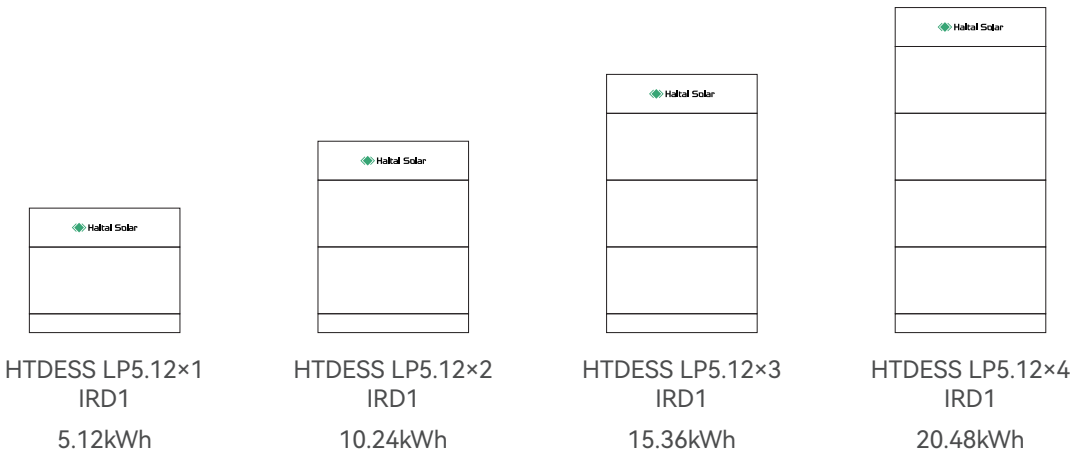
Protection rating IP65, can be installed under outdoor eaves, supports a wide range of temperature and humidity.

Designed for Residential PV Systems

Suitable for both on-grid and off-grid scenarios, works with solar power to increase the self-consumption ratio of clean energy.

Safe & Long-Lasting

LiFePO₄ battery cells with good thermal stability; standard pack-level hot aerosol fire suppression device enhances safety.



Specifications

Parameter	HTDESS LP5.12×1 IRD1	HTDESS LP5.12×2 IRD1	HTDESS LP5.12×3 IRD1	HTDESS LP5.12×4 IRD1
Battery System				
Total Battery Capacity	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Rated Voltage	51.2V			
Operating Voltage	45.6~56.2V			
Recommended Charge/ Discharge Current	50A	100A	150A	200A
Dimensions (W×H×D)	600×512×210mm	600×812×210mm	600×1112×210mm	600×1412×210mm
Weight	63kg	113kg	163kg	213kg
Max Number of Parallel Clusters	4			
Single Module Technical Parameters				
Dimensions (W×H×D)	Base: 600×90×210mm; Battery pack: 600×300×210mm; Top cover: 600×122×210mm			
Weight	Base: 6kg; Battery pack: 50kg; Top cover: 7kg			
Rated Voltage	51.2V			
Recommended Charge/ Discharge Current	50A			
Max Charge/Discharge Current	100A			
Operating Temperature	Charge: 0° C to 55° C; Discharge: -20° C to 55° C			
Application Scenario	Outdoor under eaves			
Altitude	< 3000m			
Relative Humidity	5~95%RH			
Cooling Method	Natural convection			
Battery Type	LiFePO ₄			
IP Protection Rating	IP65			
Cycle Life	DOD 80% 4000cycles (25℃), 0.5C/0.5C			
Communication Interface	CAN/RS485			
Expansion Functions	Pack-level hot aerosol fire suppression device (standard) / Heating function (optional)			

Tangshan Haitai Digital Energy Technology Co., Ltd.

Address: Houhu Industrial Park, Yutian Economic Development Zone, Tangshan City, Hebei Province, China

Website: www.haitai-solar.com Email: dess@htsolargroup.com Tel: 400-083-5985

All data, parameters, and other information contained in this specification are subject to change by the company without further notice.
The final interpretation right of this document belongs to Tangshan Haitai New Energy Technology Co., Ltd.
HAITAI 20260510 EN