

CSA SOLAR CO., LTD.



Energy Storage · Battery Division

Nova Stack Series 12.8V LiFePO₄ Battery

Low-voltage LFP storage modules engineered for home, off-grid and light commercial systems. Three capacities, one reliable platform — stackable, long-cycling, and safety-first.

Three models · 1.28 / 2.63 / 4.01 kWh

CSA Solar · Battery Storage Datasheet · Rev. 2026-09

01 · PRODUCT RANGE

One Platform, Three Capacities



NS-12-100

1.28 kWh Module

Nominal Voltage	12.8 V
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Usable Energy	1.28 kWh
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Dimension W×D×H	292×180×200 mm
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Net Weight	12 kg
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NS-12-206

2.63 kWh Module

Nominal Voltage	12.8 V
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Usable Energy	2.63 kWh
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Dimension W×D×H	309×194×295 mm
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Net Weight	24 kg
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NS-12-314

4.01 kWh Module

Nominal Voltage	12.8 V
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Usable Energy	4.01 kWh
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Dimension W×D×H	382×194×295 mm
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Net Weight	35 kg
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02 · TECHNICAL SPECIFICATIONS

Detailed Specifications

Parameter	NS-12-100	NS-12-206	NS-12-314
Cell Technology	LiFePO4 (LFP)	LiFePO4 (LFP)	LiFePO4 (LFP)
Nominal Voltage	12.8 V	12.8 V	12.8 V
Nominal Capacity	100 Ah	206 Ah	314 Ah
Battery Usable Energy	1.28 kWh	2.63 kWh	4.01 kWh
Cell Spec	3.2V 100Ah	3.2V 206Ah	3.2V 314Ah
Cycle Life	>6000 @ 80% DoD	>6000 @ 80% DoD	>6000 @ 80% DoD
Dimension (W×D×H)	292×180×200 mm	309×194×295 mm	382×194×295 mm
Net Weight	12 kg	24 kg	35 kg
Warranty	5 years	5 years	5 years



03 · APPLICATIONS & CERTIFICATION

Built for Real-World Deployment

Home & Off-Grid Storage

Daily cycling backup for residences and cabins — compact footprint, stackable scaling from 1.28 up to several kWh.

PV Self-Consumption

Pairs with low-voltage inverters to shift solar generation into the evening and cut grid dependence.

Long Cycle Life

LFP chemistry delivers highly stable performance and extended calendar life.

Safety First

Low-voltage module design with thermal and charge protection for safe, dependable operation.

Certification

UN38.3

LiFePO4 · LFP

Low Voltage