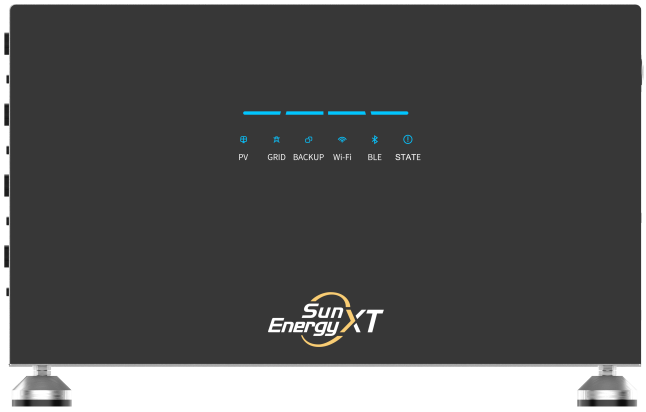
Technical Data



Technical Specifications of the Head Storage

Model		SunEnergyXT 500 Lite
PV Input (PV)	PV Breakdown Voltage (V)	100
	MPPT Voltage (V)	20 ~ 60
	MPPT Power (W)	625 × 4 or 800 × 3
	Max PV Input Current (A)	22 (4 PV inputs; value per PV input)
	PV Isc (A)	25 (4 PV inputs; value per PV input)
Battery Parameters	Battery Type	LiFePO4
	Rated Capacity (Ah)[1)]	314
	Rated Energy (Wh)[1)]	3000
	Rated Charge / Discharge Power (W)	2400 / 2600
Backup Output (AC)	Rated Output Voltage (Vac)	230
	Output Waveform	Sine Wave
	Output Voltage Range	± 1 %
	Output Frequency (Hz)	50 / 60
	Output Frequency Range (Hz)	± 0.1
	Rated Output Apparent Power (W)	2400
Grid Output (AC)	Rated Output Voltage (Vac)	230
	Output Voltage Range (V)	184 ~ 253 V
	Output Frequency (Hz)	50 / 60
	Output Frequency Range (Hz)	47.5 ~ 51.5 / 57.5 ~ 61.5
	Rated Output Power (W)	800

Model		SunEnergyXT 500 Lite
Grid Output (AC)	Output Power Factor	0.8 lagging ~ 0.8 leading
	Anti-Islanding Protection	Supported
Grid Charging (AC)	AC Max Charging Power (VA)	2400
	AC Max Charging Current (A)	12
Grid/Backup Switching	UPS Mode	≤ 10 ms
	Non-UPS Mode	< 2 s
Certifications	Safety Standards	IEC 62109-1/2; IEC 62619; IEC 60730
	EMC	IEC 61000
	Cybersecurity Certification	EN 18031
	Grid Connection Certification	VDE 4105
	Transport	UN38.3
Other Parameters	Cooling Requirements	Natural Cooling
	Ingress Protection	IP65
	Protective Class	Class I
	Fire Protection System	Integrated Automatic Aerosol Fire Suppression System
	Operating Ambient Humidity (%)	95
	Operating Temperature (°C)	-20 ~ 55 °C. Power derating above 45 °C.
	Storage Temperature (°C)	−20 ~ 45 °C (1 month); 0 ~ 35 °C, suitable for long-term storage and beneficial to the service life of the device.
	Max Operating Altitude (m)	< 2000
	Maintenance	Recommended: charge / discharge once every 3 months; at the latest, a charge / discharge cycle is required after 6 months.
	Head Storage Dimensions (L × W × H)	536 × 379 × 307 mm
	Package Dimensions (L × W × H)	630 × 502 × 434 mm
	Net Weight (kg)	58 ± 1
	Gross Weight (kg)	60 ± 1
	Cycle Life[2)]	≥ 13,000 cycles

1) The battery hardware of the 500 Lite is identical to that of the SunEnergyXT 500 (LiFePO4, 314 Ah, 5,024 Wh).
Its rated energy is limited by software to 3,000 Wh; the reserve for deep-discharge protection lies outside this range.
The limit can be lifted for a fee (upgrade to SunEnergyXT 500 or 500 PRO).
2) 25 ± 2 °C, 100 % DoD, 0.5C charge / 0.5C discharge, 70 % remaining capacity (EoL).
For the 500 Lite, the same energy throughput (40,192 kWh) equals approx. 13,000 full cycles of the rated energy of 3,000 Wh.