

AC-coupled ESS Liquid Cooling Cabinet



ESS-TRENE (Liquid cooling)

125kW /261kWh



High Performance

- Premium LFP battery with guaranteed quality
- High power density, compact design
- Scalable up to MWh
- Cell-level balancing and smart temperature control



Assured Safety

- 4 level Fire safety design secures minimal risk and loss
- Aerosol Fire Suppression for Precise Protection
- IP66 rating for inverter, IP55 for cabinet
- Advanced fault detection and response



Intelligent Design

- Advanced energy management system
- VPP ready with SolaX Cloud (2030.5*, OpenADR)
- Supports micro-grids and diverse scenarios
- 7x24h remote monitoring and maintenance



Flexible Adaptability

- Grid-connected and off-grid support
- Self-developed BMS & EMS via SolaX Cloud
- One year of local historical data storage
- Optimised space utilisation



TRENE-P124B261L-E

TRENE-P125B261L-E

AC SIDE (ON-GRID)		
Rated AC power	124.9 kW	125 kW
Max. output apparent power	124.9 kVA	125 kVA
Rated AC current	181.1 A@230 V 189.3 A@220 V	181.2 A @230V 189.4 A @220V
Max. output continuous current	199.2 A@230 V 208.2 A@220 V	199.3 A @230V 208.4A @220V
Nominal AC voltage	3 / N / PE, 230 / 400 V 3 / N / PE, 220 / 380 V	
AC voltage range	340 ~ 440 V	
Nominal AC frequency	50 Hz / 60 Hz	
Adjustable Power Factor range	~ 1 (0.8 lagging to 0.8 leading)	
THDi (Rated power)	< 3%	
DC component	< 0.5% (Rated power)	
AC SIDE (OFF-GRID)		
Rated AC output voltage	3 / N / PE, 230 / 400 V 3 / N / PE, 220 / 380 V	
Rated AC frequency	50 Hz / 60 Hz	
THDv (Linear load)	< 3% (Linear load)	
Unbalance load capacity (off-grid)	100%	
Overloading capability	110%, long term; 120%, 1min	
Max. AC output continuous current	199.2 A@230 V 208.2 A@220 V	199.3 A @230V 208.4A @220V
DC SIDE		
Battery type	LFP / 314 Ah	
Battery capacity	261 kWh	
Rated battery voltage	832 V	
Battery voltage range	650 ~ 936 V	
SYSTEM PARAMETE		
Dimension (WxDxH)	1350 × 1350 × 2355 mm	
Weight	2810 kg	
Operating ambient temperature range	-35 ~ 55°C (>45°C Derating)	
Relative humidity	0 ~ 100% RH	
Max. operating altitude	3000 m	
Cooling concept	Liquid cooling	
Ingress protection	IP55	
Topology	Non-isolated	
Standard	IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 61000, IEC 62933, UN 38.3, UL9540A	
Communication interfaces	Ethernet	
Communication protocol	Modbus TCP	
Anti-corrosion degree	C4H	
Fire suppression system	Flammable gas sensor, Smoke sensor, Heat sensor, Audible and visual alarm, Aerosol, Sprinkler	
Max. Parallel quantity (off-grid)	10	

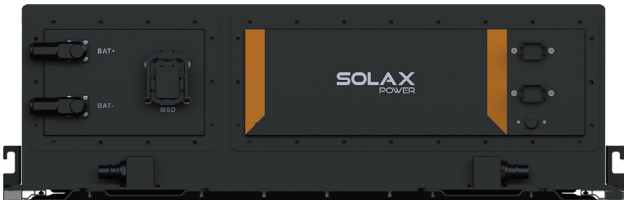
C&I ESS CABINET PCS

X3-TRENE-124.9K		X3-TRENE-125K	
AC SIDE (ON-GRID)			
Rated AC output power	124.9 kW		125 kW
Max. AC output apparent power	124.9 kVA		125 kVA
Rated AC output current	181.1 A@230 V 189.3 A@220 V		181.2 A @230V 189.4 A @220V
Max. AC output continuous current	199.2 A@230 V 208.2 A@220 V		199.3 A @230V 208.4A @220V
Nominal AC voltage	3 / N / PE, 230 / 400 V 3 / N / PE, 220 / 380 V		
AC voltage range	320 ~ 460 V		
Rated AC frequency	50 Hz / 60 Hz		
AC frequency range	50 ± 5 Hz / 60 ± 5 Hz		
Power Factor range	~ 1 (0.8 lagging to 0.8 leading)		
THDi (Rated power)	< 3%		
DC component	< 0.5% (Rated power)		
Unbalance load capacity (On-grid)	100%		
AC SIDE(OFF-GRID)			
Nominal AC voltage	3 / N / PE, 230 / 400 V 3 / N / PE, 220 / 380 V		
Rated AC frequency	50 Hz / 60 Hz		
THDv (Linear load)	< 3% (Linear load)		
Unbalance load capacity (off-grid)	100%		
Overloading capability	110%, long term; 120%, 1min		
Max. AC output continuous current	199.2 A@230 V 208.2 A@220 V	199.3 A @230V 208.4A @220V	
DC SIDE			
Battery voltage range	650 ~ 936 V		
Max. charge / discharge current	202.1 A	202.3 A	
GENERAL			
Max. efficiency	98.0%		
Ingress protection	IP66		
Operating ambient temperature range	-35~ 60°C (>45°C Derating)		
Max. operating altitude	3000 m		
Relative humidity	0 ~ 100% RH		
Typical noise emission	< 75 dB		
Dimensions (W × H × D)	665 × 310 × 880 mm		
Weight	95 kg		
Cooling concept	Smart air cooling		
Communication interfaces	RS485, CAN, Ethernet, DI		



X3-TRENE-124.9K	X3-TRENE-125K
PROTECTION	
Detection, AC over / under voltage protection, DC component monitoring, AC overcurrent protection, AC ection, Anti-islanding protection, AC input phase sequence error protection, Grid frequency high / low ross protection,DC reverse-polarity protection, DC overcurrent protection, DC short circuit protection, DC age protection, Over-temperature protection, Communication failure protection,Type II SPD on AC side	
STANDARD	
IEC 62477	
IEC 61000-6, IEC 62920	
549, VDE4105, G99, AS4777, CEI 0-21, IEC61727, PEA / MEA, NRS-097-2-1, RD1699, TOR	

C&I ESS CABINET PACK



TB-HR522	
Battery type	LFP 314 Ah
Battery capacity	52.2 kWh
Battery configuration	1P52S
Rated battery voltage	166.4 V
Battery voltage range	130 ~ 187.2 V
Weight	330 kg
Dimensions (W × H × D)	790 × 250 × 1140 mm
Charge / Discharge current	157 A
Relative humidity	0 ~ 95% RH (non-condensing)
Max. operating altitude	3000 m
Ingress protection	IP67
Communication	CAN

If there is any change in product size and parameters, please refer to the latest information without prior notice.