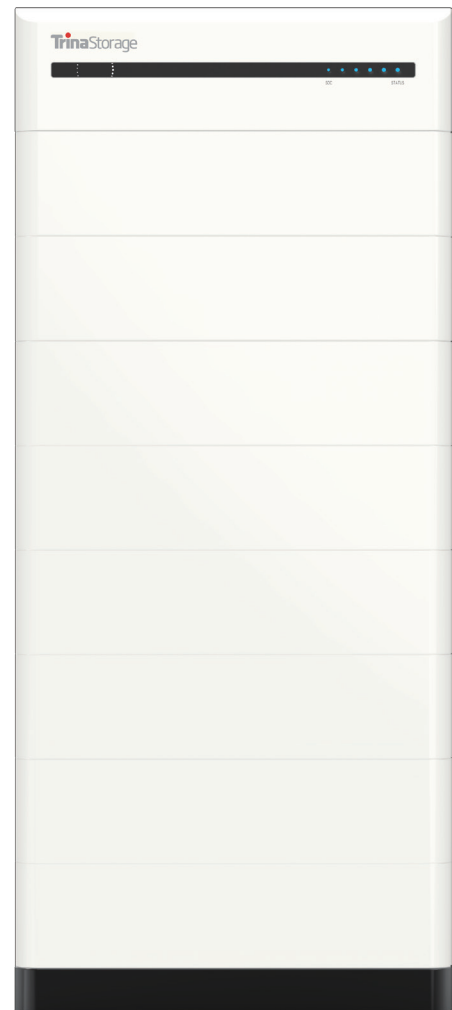


Nexeos

Residential Energy Storage System

Nexeos series



Easy to install

- Lightweight and compact design
- Modular design of the battery with plug-in connections
- Quick and easy installation with few tools
- Simple battery and smart meter communication connection



Flexible and easy to operate

- 3 independent MPPTs from 8 kW - ideal even for complex roofs
- Active shading management - more energy yield without optimizers
- Commissioning, monitoring and service access via the MyNex app
- Securely compatible with all TrinaSolar Vertex S+ solar modules



Reliable and safe

- Up to 150% oversizing of the PV generator
- 100% unbalanced three-phase AC output
- Fast switchover time to backup power supply (< 10 ms)
- Suitable for outdoor installation
- Comprehensive protection with battery monitoring at cell level
- Supports remote shutdown

*TrinaStorage recommends indoor installation

TRH 6K-T2		TRH 8K-T3		TRH 10K-T3		TRH 12K-T3		
PV Input								
Max. PV power	9000 Wp		12000 Wp		15000 Wp		18000 Wp	
MPPT voltage range	150-950 V							
Max. input voltage	1100 V							
Max. input current per MPPT	20 A		16 A					
Max. short circuit current per MPPT	30 A		24 A					
No.of MPPT	2		3					
No.of PV Strings per MPPT	1		1					
Battery								
Battery type	LFP							
Battery voltage range	120~600 V							
Max. charge/discharge power ¹	6000 W		8000 W		10000 W		12000 W	
Max. charge/discharge current	30 A							
AC Grid								
Rated output power	6000 W		8000 W		10000 W		12000 W	
Max. output apparent power	6000 VA		8000 VA		10000 VA		12000 VA	
Max. output current	9.6 A		12.8 A		16.0 A		19.2 A	
Max. input power from grid	12000 W		16000 W		20000 W		24000 W	
Max. input current from grid	17.4 A		23.2 A		29.0 A		34.8 A	
Rated grid voltage	3/N/PE , 220/380 V ; 230/400 V ; 240/415 V							
Voltage range	270~480 V							
Rated grid frequency	50 Hz / 60 Hz							
Power factor	1 / 0.8 leading to 0.8 lagging							
AC Output (EPS)								
Rated current	8.7 A		11.6 A		14.5 A		17.4 A	
Rated apparent power	6000 VA		8000 VA		10000 VA		12000 VA	
Max. current (@400V)	8.7 A		11.6 A		14.5 A		17.4 A	
Peak output power	2 times of rated power, 10 s							
Voltage range	3/N/PE , 220/380 V ; 230/400 V ; 240/415 V							
Rated output frequency	50 Hz / 60 Hz							
Switching time	<10 ms							
Power factor	1 / 0.8 leading to 0.8 lagging							
Efficiency								
Euro efficiency	97.5%		97.2%		97.9%			
Max. efficiency	98.2%		98.0%		98.4%			
Protection								
DC surge protection	Yes							
Insulation resistance detection	Yes							
PV string input reverse polarity protection	Yes							
Battery input reverse polarity protection	Yes							
Ground fault monitoring	Yes							
Residual current monitoring unit	Yes							
AC short circuit protection	Yes							
Anti-islanding protection	Yes							
General Data								
Weight	27 kg		28.5 kg					
Diemensions (W×H×D)	548 mm × 468 mm × 224 mm							
Operating temperature range	-25 °C~ +60 °C							
Max. relative humidity	100%							
Max. operating altitude	4000 m							
Cooling type	Natural convection							
Ingress protection rating	IP66							
Certification ²	EN/IEC 62109-1, EN/IEC 62109-2, EN 61000-6, EN 50549-1, VDE-AR-N 4105							

¹ Actual power depends on the battery.

² For all standards refer to the certificates category in the TrinaStorage website. <https://residentialstorage.trinasolar.com>



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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Version number: TSM_EN_2024_B

Performance Specifications Battery Module

Battery type	LFP
Nominal capacity	2.56 kWh
Usable capacity	90%
Nominal voltage	51.2 V
Operating voltage	40~58.4 V
Max. charge current	25 A
Max. discharge current	30 A

General Data

Weight	30.6 kg
Dimensions (W×H×D)	540 mm × 130 mm × 390 mm
Operating temperature range	Charge: 0~+50 °C Discharge: -20~+50 °C
Relative humidity range	5~95%, non-condensing
Altitude	<3000 m
Cooling type	Natural convection
Installation method	Floor standing
Ingress protection rating	IP65
Communication	CAN
Certifications and standards	IEC62619, IEC62040-1, IEC62477-1, IEC61000-6-1/2/3/4, UN38.3

System Data

System model	TRB 7.5K-HT	TRB 10K-HT	TRB 12.5K-HT	TRB 15K-HT	TRB 17.5K-HT	TRB 20K-HT
						
Number of battery modules	3	4	5	6	7	8
Number of High-voltage (HV) box	1	1	1	1	1	1
Nominal capacity	7.68 kWh	10.24 kWh	12.8 kWh	15.36 kWh	17.92 kWh	20.48 kWh
Nominal voltage	153.6 V	204.8 V	256 V	307.2 V	358.4 V	409.6 V
Operating voltage	120~175.2 V	160~233.6 V	200~292 V	240~350.4 V	280~408.8 V	320~467.2 V
Total weight	107.8 kg	138.4 kg	169 kg	199.6 kg	230.2 kg	260.8 kg
Total width	540 mm					
Total depth	390 mm					
Total height	600 mm	730 mm	860 mm	990 mm	1120 mm	1250 mm

All data subject to change without prior notice



TrinaStorage