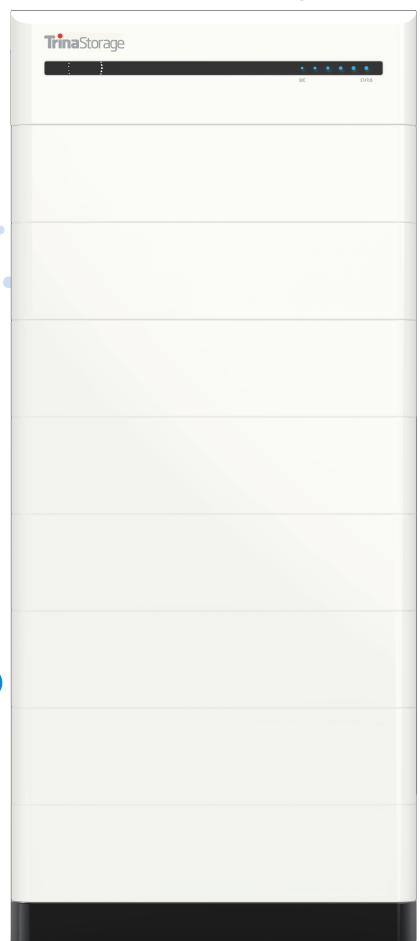


# Nexeos

## Residential Energy Storage System

Nexeos series



### Easy to install

- Light-weight and compact wall mount design
- Battery modular design with plug-in connections
- Quick and easy-to-install with basic tools
- Simple battery and smart meter interfaces for faster installation

### Safe and Reliable

- Up to 150% PV array oversizing for higher yields
- 100% unbalanced three phase AC output
- UPS switching time < 10 ms
- IP66 rated design for inverter
- IP65 rated design for battery pack
- All-round BMS protection with Cell-level monitoring
- Support remote shutdown

### User-Friendly

- Max. 3 independent MPPT's for flexible and higher kWp PV array design
- Setup, commissioning and monitoring via the app
- Intelligent work modes and customizable battery management for DOD /Time of Use/Power setting
- Support higher input current for Max. 20 A, ideal for bifacial and large PV modules

|   | TRH 6K-T2   | TRH 8K-T3 | TRH 10K-T3 | TRH 12K-T3 |
|---|---|-----------|------------|------------|
| <b>PV Input</b>                             |   |           |            |            |
| Max. PV power                               | 9000 Wp   | 12000 Wp  | 15000 Wp   | 18000 Wp   |
| MPPT voltage range                          | 150~950 V   | 200~950 V |            |            |
| Max. input voltage                          | 1100 V  |           |            |            |
| Max. input current per MPPT                 | 20A   | 16 A      |            |            |
| Max. short circuit current per MPPT         | 30A   | 24 A      |            |            |
| No.of MPPT                                  | 2   | 3         |            |            |
| No.of PV Strings per MPPT                   | 1   | 1         |            |            |
| <b>Battery</b>                              |   |           |            |            |
| Battery type                                | LFP   |           |            |            |
| Battery voltage range                       | 120~600 V   |           |            |            |
| Max. charge/discharge power <sup>1</sup>    | 6000 W  | 8000 W    | 10000 W    | 12000 W    |
| Max. charge/discharge current               | 30 A  |           |            |            |
| <b>AC Grid</b>                              |   |           |            |            |
| 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  |           |            |            |
| <b>AC Output (EPS)</b>                      |   |           |            |            |
| 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   |
| 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  |           |            |            |
| <b>Efficiency</b>                           |   |           |            |            |
| Euro efficiency                             | 97.5%   | 97.2%     | 97.9%      |            |
| Max. efficiency                             | 98.2%   | 98.0%     | 98.4%      |            |
| <b>Protection</b>                           |   |           |            |            |
| 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   |           |            |            |
| <b>General Data</b>                         |   |           |            |            |
| Weight                                      | 27 kg   | 28.5 kg   |            |            |
| Dimensions (W×H×D)                          | 548 mm × 518 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 <sup>2</sup>                  | EN/IEC 62109-1, EN/IEC 62109-2, EN 61000-6, EN 50549-1, VDE-AR-N 4105, CEI 0-21, G98, G99 |           |            |            |

<sup>1</sup> Actual power depends on the battery.

<sup>2</sup> For all standards refer to the certificates category in the TrinaStorage website.


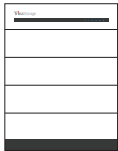

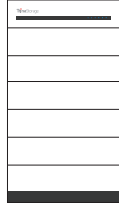


## Performance Specifications Battery Module

|                        |           |
|------------------------|-----------|
| 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<br>Discharge: -20~+50 °C                    |
| Relative humidity range      | 5~95%, non-condensing  |
| Altitude                     | < 3000m  |
| 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                    | 107.8kg  | 138.4kg  | 169kg  | 199.6kg  | 230.2kg  | 260.8kg  |
| 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

**Trina**Storage