

YOUR
SMART
ENERGY



STORION-T50/T100 (Indoor)

COMMERCIAL &
INDUSTRIAL SERIES



Self-Sufficient

Time Period Charge and Discharge

On/off grid switch within 20 ms



Dual Power Supply

200% PV oversizing



STORION-T50/T100



Battery

| Item | Parameters | |
|-------------------------------------|---|---|
| |  |  |
| Battery Module | M38180-S | M38210-S |
| Battery Type | LiFePO ₄ | LiFePO ₄ |
| Pack | 3.2V / 90Ah@2P12S | 3.2V / 105Ah@2P12S |
| Internal Resistance | ≤10 mΩ | ≤10 mΩ |
| Energy Capacity | 6.912 kWh | 8.064 kWh |
| Usable Capacity | 6.22 kWh | 7.25 kWh |
| Depth of Discharge (DoD) | 90% | 90% |
| Rated Voltage | 38.4 V | 38.4 V |
| Operating Voltage Range | 36 ~ 43.2 V | 36 ~ 43.2 V |
| Max. Charging / Discharging Current | 180 A | 105 A |
| Cycle Life | 80%EOL with ≥6000@1C 25°C | 80%EOL with ≥6000@0.5C 25°C |
| Operating Temperature Range | -10°C ~ 50°C | -10°C ~ 50°C |
| Ingress Protection | IP21 | IP21 |
| Relative Humidity | 15% ~ 85% | 15% ~ 85% |
| Warranty | 3 Years Product Warranty, 10 Years Performance Warranty | |
| Communication | CAN | CAN |
| Dimensions (W×D×H) | 326×654×250 mm | 326×560×222 mm |
| Weight | 64 kg | 62 kg |
| String Pack Quantity | 8 ~ 12 | 8 ~ 12 |
| Certifications | IEC62619, UN38.3 | |

High Voltage Box

| Item | Parameters | |
|----------------------------|---|---|
| |  |  |
| Model | HV900180-II | HV900105-III |
| Rated Current | 180 A | 105 A |
| Max. Current | 220 A | 138 A |
| Rated Voltage | 900 VDC | 900 VDC |
| Ultimate Breaking Capacity | 250 kA | 250 kA |
| Auxiliary Power Supply | 220 VAC | 220 VAC |
| BCMU Power Dissipation | 4 W | 4 W |
| Dimensions (W×D×H) | 91.5×440×250.1 mm | 91.5×440×250.1 mm |
| Weight | 20 kg | 20 kg |

STORION-T50/T100



Battery Cluster System



| | | |
|--|--------------------------------|---------------------------------|
| Configuration | HV900180-II, M38180-S, Rack | HV900105-III, M38210-S, Rack |
| Dimensions (W×D×H) | 710×572×1950mm | 743.3×602×2241.5mm |
| Battery Racks | 2×7 | 2×7 |
| Overall Weight | 657 ~ 913 kg | 641 ~ 890 kg |
| Single Cluster Capacity | 55.29 ~ 82.94 kWh | 64.5 ~ 96.8 kWh |
| Max. Charging / Discharging Current | 180 A | 105 A |
| Battery Cluster Voltage Range | 288 ~ 518.4 V | 288 ~ 518.4 V |

Inverter



| Model | PWG2-50k | PWG2-100k |
|--|---|-----------|
| PV Voltage Range | 650 ~ 900 V (MPPT 520 ~ 800 V) | |
| MPPT Number | 1 | |
| Battery Voltage Range | 250 ~ 520 V | |
| Max. PV Input Current | 192 A | 384 A |
| Max. PV Input Power | 100 kW | 200 kW |
| Max. Charging / Discharging Current | 150 A | 300 A |
| Nominal Power | 50 kVA | 100 kVA |
| Rated Voltage | 400 V | |
| Grid Voltage Range | 340 ~ 460 V, 3L / N / PE | |
| Power Factor Range | 0.99 / -1 ~ 1 | |
| Overload Capacity | 100%~110% (long-term); 110%~120% (1 min); 120%~150% (200ms) | |
| Rated AC Current | 72 A | 144 A |
| Off-Grid Output Voltage Range | 360 ~ 440 V | |
| Rated Output Frequency | 50 / 60 Hz | |
| Dimensions (W×D×H) | 800×800×2160 mm | |
| Weight | 520 kg | 750 kg |

DC Junction Box



| | | |
|--------------|-----------------------------|-----------------|
| TOP BMU Box | TOP BMU Power | 30 W |
| | Communication | RS-485×6, CAN×3 |
| | SCADA Power | 18 W |
| Junction Box | Max. Voltage | 900 V |
| | Max. Current | 400 A |
| | Operating Temperature Range | -30°C ~ 50°C |
| | Weight | 100 kg |
| | Dimensions (W×D×H) | 600×600×1650 mm |

Meter (Optional)



| Model | DTSU666 | |
|---------------------|--------------------|-------------------|
| Voltage Input | Rated Voltage | 230V AC / 400V AC |
| | Accuracy Class | ±1% |
| Communication Mode | RS485, Modbus RTU | |
| General Parameters | Dimensions (W×D×H) | 72×101×80 mm |
| CT Model | AKH-0.66, K-30×20 | |
| CT Current Ratio | 400 / 5 A | |
| CT Perforation Size | 32×22 mm | |

STORION-T50/T100



System Technical Specifications

| Item | STORION-T50 (Indoor) | STORION-T100 (Indoor) |
|-----------------------------|--|-----------------------|
| DC Data | | |
| Battery Type | LiFePO ₄ | |
| Depth of Discharge (DoD) | 90% (On-Grid), 85% (Off-Grid) | |
| Battery Voltage Range | 288 ~ 520 V | |
| Battery Energy Range | 48.384 ~ 967.68 kWh | |
| Standard Battery Cluster | 1 ~ 10 | |
| PV Voltage Range | 650 ~ 900 V | |
| MPPT Voltage Range | 520 ~ 800 V | |
| Number of MPPT | 1 | |
| AC Data - Grid | | |
| Rated Power | 50 kVA | 100 kVA |
| Max. Output Power | 55 kVA | 110 kVA |
| Max. Grid Input Power | 100kVA (with STS) | 200kVA (with STS) |
| Rated Grid Voltage | 3L / N / PE, 340 ~ 460 V | |
| Grid Frequency | 50 / 60 Hz | |
| Rated Current | 72 A | 144 A |
| AC Data - Backup | | |
| Rated Output Power | 50 kVA | 100 kVA |
| Rated Output Voltage | 360 ~ 440 V | |
| Rated Frequency | 50Hz / 60Hz | |
| Overload Capacity | 100%~110% (long-term); 110%~120% (1min); 120%~150% (200ms) | |
| General Data | | |
| Ingress Protection | IP20 | IP20 |
| Operating Temperature Range | -20°C ~ 50°C | |
| Relative Humidity | 0 ~ 95% (No Condensation) | |
| Max. Working Altitude | 3000m / 9842ft | |
| Warranty | 3 Years Product Warranty | |
| Cooling Method | Forced Air Cooling / HVAC | |
| Communication Interfaces | RS485, CAN, Modbus, Ethernet | |
| Certifications | NRS 097-2-1:2017 Edition 2.1, EN IEC 61000-6-2&4, IEC62109-1:2010, IEC62109-2:2011, Amd:1:2021 | |

* The PV power must be less than the smaller value of the rated power of the battery and the PCS, and the load power must also be less than the smaller value of the rated power of the battery and the PCS.



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