



C&I Storage system

PVX-215, PVX-215(107)-HV

This new Energy Storage System is a modular solution with Hybrid Cooling and nominal capacity up to 215 kWh. It is designed to offer an innovative and flexible solar solution for commercial and industrial applications.

From 107 to 215 kWh

Technical data and types

| Model | PVX-215 | PVX-215-HV | PVX-107-HV |
|---|---|---|--|
| System Data (PCS + Battery Packs) | | | |
| Nominal energy | 215.0 kWh | 215.0 kWh | 107.5 kWh |
| Nominal capacity | 280.0 Ah | 280.0 Ah | 280.0 Ah |
| Maximum cycle rate | 0.5 CP | 0.5 CP | 1 C |
| Rated voltage | 768 V | 768 V | 384 V |
| Operative voltage range | 648–864 V | 648–864 V | 324–432 V |
| Maximum current | 221.2 A | 221.2 A | 280.0 A |
| Battery Parameters | | | |
| Battery pack model | ESM-54-2E1 | ESM-54-2E1 | ESM-54-1E1 |
| Cell chemistry | LPF | LPF | LPF |
| Number of battery packs | 4 | 4 | 2 |
| Rated voltage | 192 V | 192 V | 192 V |
| Rated current | 140 A | 140 A | 280 A |
| Charging/Discharging Power | 26.88 kW | 26.88 kW | 53.76 kW |
| Maximum charge/discharge current | 183 A | 183 A | 280 A |
| Intra-battery rack balancing mode | Battery pack-level active balancing | Battery pack-level active balancing | Battery pack-level active balancing |
| PCS Parameters (AC) | | | |
| DCDC model | - | DCDC-110U-LM51 | DCDC-110U-LM51 |
| DCDC configuration of a battery rack | - | 1 | 1 |
| PCS model | PCS-108K-MB1 | PCS-108K-MB1 | PCS-108K-MB1 |
| Three-phase three-wire or three-phase four-wire | Supported | Supported | Supported |
| Rated mains voltage | 380 V/400 V/415 V | 420 V/440 V/480 V | 380 V/400 V/415 V 420 V/440 V/480 V |
| Rated charge and discharge current of the system | 164.1 A @ 380 V _{AC} 155.9 A @ 400 V _{AC} 150.3 A @ 415 V _{AC} | 148.5 A @ 420 V _{AC} 141.8 A @ 440 V _{AC} 130.0 A @ 480 V _{AC} | 164.1 A @ 380 V _{AC} 155.9 A @ 400 V _{AC} 150.3 A @ 415 V _{AC} 148.5 A @ 420 V _{AC} 141.8 A @ 440 V _{AC} 130.0 A @ 480 V _{AC} |
| Rated charge and discharge current of the system (1.1 times overload) | 180.5 A @ 380 V _{AC} 171.5 A @ 400 V _{AC} 165.3 A @ 415 V _{AC} | 163.4 A @ 420 V _{AC} 155.9 A @ 440 V _{AC} 142.9 A @ 480 V _{AC} | |
| Rated charge and discharge current of the system (1.2 times overload) | 197.0 A @ 380 V _{AC} (1 min) 187.1 A @ 400 V _{AC} (1 min) 180.4 A @ 415 V _{AC} (1 min) | 178.2 A @ 420 V _{AC} (1 min) 170.1 A @ 440 V _{AC} (1 min) 155.9 A @ 480 V _{AC} (1 min) | |
| Rated charge and discharge current of the system (1.3 times overload) | 213.4 A @ 380 V _{AC} (5s) 202.7 A @ 400 V _{AC} (5s) 195.4 A @ 415 V _{AC} (5s) | 193.0 A @ 420 V _{AC} (5s) 184.3 A @ 440 V _{AC} (5s) 168.9 A @ 480 V _{AC} (5s) | |
| Maximum power | 140.4 kW | 140.4 kW | 108.0 kW |
| Communication | | | |
| System communications port | Ethernet/Optical fiber (optional)/RS485 | Ethernet/Optical fiber (optional)/RS485 | Ethernet/Optical fiber (optional)/RS485 |
| System communications protocol | Modbus TCP | Modbus TCP | Modbus TCP |
| Environmental | | | |
| IP rating | IP55 | IP55 | IP55 |
| Operating temperature range | -30°C to +55°C (derated above 50°C) | -30°C to +55°C (derated above 50°C) | -30°C to +55°C (derated above 50°C) |
| Storage temperature range | -35°C to +60°C | -35°C to +60°C | -35°C to +60°C |
| Operating humidity range | 0–100% RH (non-condensing) | 0–100% RH (non-condensing) | 0–100% RH (non-condensing) |
| Maximum operating altitude | 4000 m | 4000 m | 4000 m |
| Noise limit (rated working conditions) | ≤ 65 dB | ≤ 65 dB | ≤ 65 dB |
| General Specification | | | |
| Battery temperature control mode | Liquid cooling | Liquid cooling | Liquid cooling |
| LTMS model | TMS-H008SG00 | TMS-H008SG00 | TMS-H008SG00 |
| LTMS quantity | 1 | 1 | 1 |
| Dimensions (W x D x H) | 1150 mm x 1800 mm x 2100 mm | 1150 mm x 1800 mm x 2100 mm | 1150 mm x 1800 mm x 2100 mm |
| Weight | ≤ 2.8 t | ≤ 2.8 t | ≤ 2.0 t |
| Surge protection | Type II (AC port) | Type II (AC port) | Type II (AC port) |
| Auxiliary mains power supply | 176–300 V AC, single-phase, dual-live wire ≤ 5 kVA @ 0.5CP | 176–300 V AC, single-phase, dual-live wire ≤ 5 kVA @ 0.5CP | 176–300 V AC, single-phase, dual-live wire ≤ 5 kVA @ 1C |
| Auxiliary power loss in standby mode (LTMS not started) | ≤ 150.0 W | ≤ 150.0 W | ≤ 150.0 W |
| Thermal runaway suppression system | Aerosol (≥ 110 g) | Aerosol (≥ 110 g) | Aerosol (≥ 110 g) |
| Maximum efficiency | 91.30% | 89.00% | 86.00% |
| Standards compliance | | | |
| Marking | RoHS 6 | RoHS 6 | RoHS 6 |
| EMC | Class B | Class B | Class B |
| Safety Certifications | GB/T 36276, IEC 62619, IEC 62477-1; IEC 61000-3-12, etc. | GB/T 36276-2018, IEC 62619, IEC 62477-1, etc. | GB/T 36276, IEC 62619, IEC 62477-1; IEC 61000-3-12, etc. |

**Remarks:**

- Features not specifically listed in the present data sheet are not included in the product
- Please refer to FIMER's Solar page for further details

For more information please contact your local MA Solar Italy srl representative or visit:

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