# OPTIM US A300-HY

M5-300kWh-1000V

156.8~1565kWh

50~500kW

0.5C

400Vac

**Hybrid Inverter Integrated**

**Flexible Configuration**

**Long Time Backup**

**Easy Set-up & Maintenance**

Wide Temp Range

Ancillary Service

Electricity Arbitrage

Demand Response

Backup

# A300-HY

OPTIM US / A300-HY

| General Data | M5-300kWh-1000V |
|---|---|
| Dimension (W*D*H mm,w/o inverter) | 1500*1300*2200 |
| Weight (tons) | 3.5 |
| Working Temperature Range (℃) | -20~55* |
| Protection Class | IP55 |
| Altitude (m) | ≤3000 |
| Humidity | 0~95% |
| Fire extinguishing | Aerosol |
| Cooling System | Air Cooling |
| Cooling system consumption (kW, Cooling/Heating) | 5/6.4 |
| Aux. Power Consumption (kW, continuous/peak, incl. HVAC) | 2.35/4.26 |
| Max.parallel No. | 5 |
| Anti-corrosion | C3 |
| Certification | UN38.3/UN 3480/IEC62619/IEC62040-1/CE/UKCA(EMC/RED)/VDE2510-50/UL1973/UL9540A G99/VDE-AR-N 4105/EN 50549-1/EN 50549-10/EIFS 2018.2/IEC 62116/ IEC 61727/IEC 60068/IEC 61683/EN 50530 |

| Battery Data | |
|---|---|
| Battery Type | Li-ion (LFP) |
| Nominal Capacity (kWh) | 313 |
| Continuous Operation C-rate | 0.5C |
| Max.Operation Current (A) | 180*2 |
| Depth of Discharge | 98% (single string) |
| Cycle Life | >7000 |
| DC Voltage Range (Vdc) | 560~720 (single string) |
| Nominal operation current (A) | 122.5*2 |
| Round-trip Efficiency@ 0.5C-rate | 96% |

| Hybrid Data On-grid Mode | |
|---|---|
| Rated AC Power (kW) | 50/100 |
| Rated AC Output Voltage (Vac) | 400 |
| Rated AC Output Frequency (Hz) | 50/60 |
| Max AC Current (A) | 76A (Linear Load) |
| Overload Capacity | 110% |
| AC PF | >0.99 (0.8 leading ~ 0.8 lagging) |
| CEC Efficiency | 97.4% (Max.97.8%) |
| Isolation Type | Non-isolation |
| Response Time (On-Grid to Off-Grid) | <10ms |

| Operation Mode | |
|---|---|
| Communication Type | RS485 (MODBUS RTU)/LAN (MODBUS TCP/IP)/CAN |
| Operation Logic | Peak Shaving/Energy Shifting/Self-Consumption/Backup |

*Degration at temperatures below 10℃ or above 40℃

## System configuration

| | Inverter Type | 50kW | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Inverter QTY | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 |
| | Cabinet QTY / kWh \ kW | 50 | 100 | 150 | 200 | 250 | 300 | 400 | 500 |
| A300-HY | 1 / 156.8 | ■(Min) | | | | | | | |
| | 1 / 219/250/313 | ■(Opt) | ■(Std) | | | | | | |
| | 2 / 626 | ■ | ■ | | ■ | | | | |
| | 3 / 939 | ■ | ■ | ■ | | | ■ | | |
| | 4 / 1252 | ■ | ■ | ■ | ■ | | | ■ | |
| | 5 / 1565 | | ■ | | | ■ | ■ | | ■ |

Legend:
- Min. configuration
- Optional configuration
- Standard configuration

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