



FALCON 8/FALCON 10

Single-phase energy storage inverter



ON/OFF-GRID

Support on/off-grid AC coupling function.



MULTI-MACHINE PARALLEL

Support three-phase and multi-machine parallel connection.



REMOTE UPGRADE

Support BMS remote upgrade function (customized).



IP66 RATED

Engineered to last with maximum flexibility. Suitable for outdoor installation.

EFFICIENT - SAFE - DURABLE



Advanced System Monitoring
Please download the Solarman app.



TECHNICAL SPECIFICATIONS

| Model | FALCON 8 | FALCON 10 |
|---|---|-----------|
| PV input data | | |
| Max. PV input power (kW) | 12 | 15 |
| Max. PV input voltage (V) | 550 | |
| Start-up voltage (V) | 100 | |
| MPPT voltage range (V) | 100-430 | |
| Rated PV input voltage (V) | 360 | |
| No. of MPPT trackers | 2 | |
| No. of strings per MPPT tracker | 1/2 | |
| Max. input current per MPPT (A) | 16/16+16 | |
| Max. short-circuit current per MPPT (A) | 24/24/24 | |
| Battery input data | | |
| Battery type | Lithium-ion / Lead-acid | |
| Max. charge / discharge power (kW) | 8 | 10 |
| Battery voltage range (V) | 40-58 | |
| Rated battery voltage (V) | 48 | |
| Max. charging / discharging current (A) | 160/160 | 200/200 |
| Rated charge / discharge current (A) | 160/160 | 200/200 |
| Battery charging strategy | Self-adaption to BMS | |
| BMS communication | CAN | |
| AC output data (grid side) | | |
| Rated output power (kW) | 8 | 10 |
| Max. apparent output power (kVA) | 8.8 | 10 |
| Max. apparent input power(kVA) | 8.8 | 10 |
| Rated grid voltage (V) | 230 | |
| Grid voltage range (V) | 176-270 | |
| Grid input voltage (V) | 230 | |
| Rated grid frequency (Hz) | 50/60 | |
| Grid frequency range(Hz) | 47-61 | |
| Rated output current (A) | 34.8 | 43.5 |
| Max. AC output current (A) | 38.3 | 43.5 |
| Max. apparent input current (A) | 38.3 | 43.5 |
| Power factor | >1 (0.8 leading ~ 0.8 lagging) | |
| Max. grid passthrough current(A) | 43.5 | |
| THDi | <3% | |
| Grid type | L+N+PE | |
| AC output data (back-up) | | |
| Rated output power (kW) | 8 | 10 |
| Max. apparent output power (kVA) | 8.8 | 10 |
| Rated output voltage (V) | 230 | |
| Rated output frequency (Hz) | 50/60 | |
| Rated output current (A) | 34.8 | 43.5 |
| Max. AC output current (A) | 38.3 | 43.5 |
| Peak output power | ≥110%, 10mins; ≥120%, 1min; ≥130%, 1s; ≥150%, 100ms | |
| Back-up switch time (ms) | <20 | |
| THDu | <3% | |
| Protection | | |
| Supported protection | PV reverse polarity protection, Anti-islanding protection, Ground fault protection, Leakage current protection, Insulation resistance detection, Backup output short circuit protection, AC under-voltage protection, AC output over-current protection, AC over-voltage protection | |
| Surge protection | DC Type III / AC Type III | |
| Over voltage category | DC Type III / AC Type III | |
| Certifications and standards | | |
| Certificates | EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021; EN 62109-1:2010; EN 62109-2:2011 | |
| General data | | |
| Ingress protection | IP66 | |
| Operating temperature range (°C) | -25~+60 | |
| Cooling | Fan cooling | |
| Relative humidity | 0-95% (non-condensing) | |
| Operating altitude (m) | 0-2,000(derating over 2,000) | |
| Dimensions W*D*H (mm) | 486x231x530 | |
| Weight (kg) | 25.8 | |
| Inverter topology | Non-isolated | |
| Noise emission (dB) | <55 | |
| PV connection terminals | MC4 | |
| Display and communication | | |
| Display | LCD | |
| Communication | RS485/CAN | |