



FALCON 6

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.



UP TO
6kW
CHARGE/
DISCHARGE

TECHNICAL SPECIFICATIONS

Model	FALCON 6
PV input data	
Max. PV input power (kW)	9
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	1/1
Max. input current per MPPT (A)	16/16
Max. short-circuit current per MPPT (A)	24/24
Battery input data	
Battery type	Lithium-ion / Lead-acid
Max. charge / discharge power (kW)	6
Battery voltage range (V)	40-58
Rated battery voltage (V)	48
Max. charging / discharging current (A)	120/120
Rated charge / discharge current (A)	120/120
Battery charging strategy	Self-adaption to BMS
BMS communication	CAN
AC output data (grid side)	
Rated output power (kW)	6
Max. apparent output power (kVA)	6.6
Max. apparent input power(kVA)	6.6
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)	26.1
Max. AC output current (A)	28.7
Max. apparent input current (A)	28.7
Power factor	>1 (0.8 leading ~ 0.8 lagging)
Max. grid passthrough current(A)	39.1
THDi	< 3%
Grid type	L+N+PE
AC output data (back-up)	
Rated output power (kW)	6
Max. apparent output power (kVA)	6.6
Rated output voltage (V)	230
Rated output frequency (Hz)	50/60
Rated output current (A)	26.1
Max. AC output current (A)	28.7
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	ENIEC 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	Natural convection
Relative humidity	0-95% (non-condensing)
Operating altitude (m)	0-2,000(>2,000 power derating)
Dimensions W*D*H (mm)	476×215×477 (without generator port); 476×215×510 (with generator port)
Weight (kg)	20.5 (without generator port); 20.7 (with generator port)
Inverter topology	Non-isolated
Noise emission (dB)	<35
PV connection terminals	MC4
Display and communication	
Display	LCD
Communication	RS485/CAN