



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.



UP TO
10kW
CHARGE/
DISCHARGE

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	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	Fan cooling	
Relative humidity	0~95% (non-condensing)	
Operating altitude (m)	0~2,000(derating over 2,000)	
Dimensions W*D*H (mm)	486×231×530	
Weight (kg)	25.8	
Inverter topology	Non-isolated	
Noise emission (dB)	<55	
PV connection terminals	MC4	
Display and communication		
Display	LCD	
Communication	RS485/CAN	