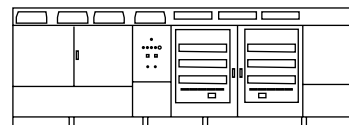

Easy maintenance.
Advanced grid support.
Integrated MV solution in the same enclosure.
Econ Mode. Remove no-load losses.
Bus Plus. Combines Solar and Storage.





REFERENCES		FS4200M	FS4201M	FS4204M
AC	AC Output Power (kVA/kW) @40 °C ^[6]	4200		
	AC Output Power (kVA/kW) @50 °C ^[6]	3900		
	Operating Grid Voltage (kV) ^[7]	34.5 kV ±10%	13.8 kV ±10%	12.47 kV ±10%
DC	DC Voltage Range ^[8]	934 V - 1500 V		
EFFICIENCY	Efficiency (Max) (η)	98.00% including MV transformer		
	CEC (η)	97.53% including MV transformer		
REFERENCES		FS4105M	FS4010M	
AC	AC Output Power (kVA/kW) @40 °C ^[6]	4105	4010	
	AC Output Power (kVA/kW) @50 °C ^[6]	3810	3720	
	Operating Grid Voltage (kV) ^[7]	34.5 kV ±10%		
DC	DC Voltage Range ^[8]	913 V - 1500 V	891 V - 1500 V	
EFFICIENCY	Efficiency (Max) (η)	97.93% including MV transformer	97.91% including MV transformer	
	CEC (η)	97.50% including MV transformer	97.49% including MV transformer	
COMMON FEATURES				
AC	Operating Grid Frequency (Hz)	60Hz		
	Current Harmonic Distortion (THDi)	< 3% per IEEE519		
	Power Factor (CosPhi) ^[1]	0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night		
DC	Maximum DC Voltage	1500 V		
	Number of Inputs	Up to 40		
	Max. DC Continuous Current (A) ^[2]	4590		
	Max. DC Short Circuit Current (A) ^[2]	6940		
	Number of Freemaq DC/DC ^[2]	Up to 4		
CABINET	Dimensions [WxDxH] (ft)	21.3 x 6.5 x 7.5		
	Dimensions [WxDxH] (m)	6.5 x 2.0 x 2.3		
	Weight (lbs)	30865		
	Weight (kg)	14000		
	Type of Ventilation	Forced air cooling		
ENVIRONMENT	Degree of Protection	NEMA 3R		
	Operating Temperature Range ^[3]	From -40 °C to +60 °C, >40 °C power derating		
	Operating Relative Humidity Range	From 4% to 100% non-condensing		
	Storage Temperature Range	From -40 °C to +60 °C		
	Max. Altitude (above sea level) ^[4]	2000 m		
CONTROL INTERFACE	Communication Protocol	Modbus TCP		
	Power Plant Controller	Optional		
	Keyed ON/OFF Switch	Standard		
PROTECTIONS	Ground Fault Protection	GFDI and isolation monitoring device		
	Humidity Control	Active heating		
	General AC Protection & Disconn.	38 kV MV switchgear (20 or 25 kA)		
	General DC Protection & Disconn.	Fuses, Motorized DC disconnect switches		
	Overvoltage Protection	Type 2 protection for AC and DC		
STANDARDS	Safety	UL 1741 / CSA 22.2 No.1071-16		
	Installation	NEC 2023		
	Utility Interconnect ^[5]	UL 1741 SA & SB / RULE 21 / RULE 14H / IEEE 15471:2020		

NOTES

- [1] Consult P-Q charts available: $Q(kVA) = \sqrt{(S(kVA))^2 - P(kW)^2}$.
 [2] Consult Power Electronics for Freemaq DC/DC connection configurations.
 [3] Optional available for temperatures below -25 °C.
 [4] Consult Power Electronics for altitudes above 1000 m.
 [5] Consult Power Electronics for other applicable standards / grid codes.
 [6] Values at 1.00-Vac nom and CosPhi=1. Consult Power Electronics for derating curves.
 [7] Consult Power Electronics for other configurations.
 [8] Consult Power Electronics for derating curves. In the event of overvoltage in the grid, the minimum DC voltage will vary proportionally with the AC voltage.