

HEM

TECHNICAL CHARACTERISTICS

REFERENCE	FS3150M	
OUTPUT	AC Output Power(kVA/kW) @50°C ^[1]	3150
	AC Output Power(kVA/kW) @25°C ^[1]	3465
	Operating Grid Voltage(VAC) ^[2]	34.5kV ±10%
	Operating Grid Frequency(Hz)	50Hz/60Hz
	Current Harmonic Distortion (THDI)	< 3% per IEEE519
	Power Factor (cosine phi) ^[3]	0.5 leading ... 0.5 lagging adjustable / Reactive Power injection at night
INPUT	MPPt @full power (VDC)	891V-1310V
	Maximum DC voltage	1500V
	Number of inputs ^[2]	Up to 36
	Max. DC continuous current (A)	3970
	Max. DC short circuit current (A)	6000
EFFICIENCY & AUXILIARY SUPPLY	Max. Efficiency PAC, nom (η)	98% including MV transformer (preliminary)
	Max. Power Consumption (KVA)	20
CABINET	Dimensions [WxDxH] (ft)	20x6.5x7 (preliminary)
	Type of ventilation	Forced air cooling
ENVIRONMENT	Degree of protection	NEMA3R - IP54 / IP65 available
	Permissible Ambient Temperature	-35°C ^[4] to +60°C / >50°C Active Power derating
	Relative Humidity	4% to 100% non condensing
	Max. Altitude (above sea level) ^[5]	1000m
	Noise level ^[6]	< 79 dBA
CONTROL INTERFACE	Interface	Graphic Display
	Communication protocol	Modbus TCP
	Plant Controller Communication	Optional
	Keyed ON/OFF switch	Standard
PROTECTIONS	Ground Fault Protection	GFDI and Isolation monitoring device
	General AC Protection	MV Switchgear (configurable)
	General DC Protection	Fuses
	Overvoltage Protection	AC, DC Inverter and auxiliary supply type 2
CERTIFICATIONS	Safety	UL1741, CSA 22.2 No.1071-01, UL62109-1, IEC62109-1, IEC62109-2
	Compliance	NEC 2014 / NEC 2017 (optional)
	Utility interconnect	UL 1741SA-Sept. 2016 / IEEE 15471-2005

NOTES

[1] Values at 1.00•Vac nom and cos Φ=1. Consult Power Electronics for derating curves.
 [2] Depending on the project configuration.
 [3] Consult P-Q charts available: $Q(kVAR)=\sqrt{(S(kVA))^2-P(kW)^2}$.
 [4] Heating resistors kit option below -20°C.
 [5] Consult Power Electronics for other altitudes.
 [6] Readings taken 1 meter from the back of the unit.