

HEM

TECHNICAL CHARACTERISTICS

		MV CENTRAL STRING INVERTER
REFERENCE		FS3000M
OUTPUT	AC Output Power(kVA/kW) @50°C ^[1]	3000
	AC Output Power(kVA/kW) @25°C ^[1]	3300
	Operating Grid Voltage(VAC) ^[2]	34.5kV / 27.6kV / 24.94kV / 13.8kV / 12.47kV
	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)	849V-1310V
	Maximum DC voltage	1500V
	Number of inputs	4 per MPPT
	Number of MPPTs	Up to 6
EFFICIENCY & AUXILIARY SUPPLY	Max. Efficiency PAC, nom (η)	98% (preliminary)
	Max. Power Consumption (KVA)	30
CABINET	Dimensions [WxDxH] [ft]	20 x 6.5 x 7
	Type of ventilation	Forced air cooling
ENVIRONMENT	Degree of protection ^[4]	IP54 / NEMA3R
	Permissible Ambient Temperature	-35°C ^[5] to +60°C / >50°C Active Power derating
	Relative Humidity	4% to 100% non condensing
	Max. Altitude (above sea level)	1000m; >1000m power derating (Max. 4000m)
	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
	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 2017
	Utility interconnect	UL 1741SA-Sept. 2016 / IEEE 1547.1-2005

NOTES [1] Values at 1.00•Vac nom and cos Φ =1. Consult Power Electronics for derating curves.
 [2] Consult Power Electronics for other configurations.
 [3] Consult P-Q charts available: $Q(kVAr)=\sqrt{(S(kVA))^2-P(kW)^2}$.
 [4] IP65 available. Consult Power Electronics.
 [4] Heating resistors kit option below -20°C.
 [5] Readings taken 1 meter from the back of the unit.