

HEM

UL

Easy maintenance.

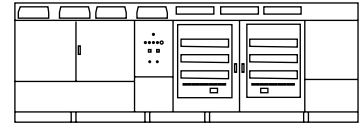
Advanced grid support.

Integrated MV solution in the same enclosure.

Econ Mode. Remove no-load losses.

Bus Plus. Combines Solar and Storage.





COMMON FEATURES

AC	Current Harmonic Distortion (THDi)	<3% per IEEE 519
	Power Factor (CosPhi) [2]	0.5 leading ... 0.5 lagging adjustable / Reactive power injection at night
DC	Maximum DC Voltage	1500 V
	Number of Inputs	Up to 40
EFFICIENCY	Number of Freemaq DC/DC [4]	Up to 4
	Efficiency (Max) (η)	98.00% including MV transformer
CABINET	CEC (η)	97.53% including MV transformer
	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
ENVIRONMENT	Type of Ventilation	Forced air cooling
	Operating Temperature Range [5]	From -25 °C to +60 °C, >30 °C power derating
	Operating Relative Humidity Range	From 4% to 100% non-condensing
CONTROL INTERFACE	Storage Temperature Range	From -40 °C to +60 °C
	Communication Protocol	Modbus TCP
	Power Plant Controller	Optional
PROTECTIONS	Keyed ON/OFF Switch	Standard
	Ground Fault Protection	GFDI and isolation monitoring device
	Humidity Control	Active heating
	General DC Protection & Disconnection	Fuses, Motorized DC disconnect switches
CERTIFICATIONS & STANDARDS	Overvoltage Protection	Type 2 protection for AC and DC
	Safety	UL 1741 / CSA 22.2 No.107.1-16
	Installation	NEC 2023
	Utility Interconnect [7]	UL 1741 SA & SB / IEEE 1547.1

REFERENCES

		FS5000MU
AC	AC Output Power (kVA/kW) @30 °C [1]	5030
	AC Output Power (kVA/kW) @35 °C [1]	5000
	AC Output Power (kVA/kW) @40 °C [1]	4780
	AC Output Power (kVA/kW) @50 °C [1]	4345
	Operating Grid Voltage (kV)	34.5 kV ±10%
	Operating Grid Frequency (Hz)	60 Hz
DC	DC Voltage Range Full Power [3]	934 V – 1300 V
	Max. DC Continuous Current (A) [4]	5495
	Max. DC Short Circuit Current (A) [4]	8000
ENVIRONMENT	Degree of Protection	NEMA 3R
	Max. Altitude (above sea level) [6]	2000 m
PROTECTIONS	General AC Protection & Disconnection	38 kV MV switchgear (V)

REFERENCES

		FS5075MU
AC	AC Output Power (kVA/kW) @30 °C [1]	5260
	AC Output Power (kVA/kW) @35 °C [1]	5075
	AC Output Power (kVA/kW) @40 °C [1]	4860
	AC Output Power (kVA/kW) @50 °C [1]	4430
	Operating Grid Voltage (kV)	34.5 kV ±10%
	Operating Grid Frequency (Hz)	60 Hz
DC	DC Voltage Range Full Power [3]	976 V – 1300 V
	Max. DC Continuous Current (A) [4]	5498
	Max. DC Short Circuit Current (A) [4]	8000
ENVIRONMENT	Degree of Protection	NEMA 3R
	Max. Altitude (above sea level) [6]	2000 m
PROTECTIONS	General AC Protection & Disconnection	38 kV MV switchgear (V)

NOTES

- [1] Values at 1.00-Vac nom and CosPhi=1. Consult Power Electronics for derating curves.
- [2] Consult P-Q charts available: $Q(kVar)=\sqrt{(S(kVA))^2-P(kW)^2}$.
- [3] 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.
- [4] Consult Power Electronics for Freemaq DC/DC connection configurations.
- [5] Optional available for temperatures below to -25 °C.
- [6] Consult Power Electronics for altitudes above 1000 m.
- [7] Consult Power Electronics for other applicable standards / grid codes.