



## Distributed Grid Power Conversion System (DGPCS)

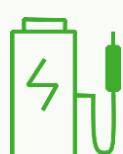
- 1 MW power capacity scale up to 9X
- Integrate up to three AC or DC Energy sources
- Support grid-tied and power backup operation



Data Centers



Commercial Building



EV Charging Station



Campus



Factory

# Features



## Grid Integration and Power Control

- Single-stage power conversion
- Power capacity: 1 MW scale up to 9X
- Input grid voltage: 4.16 kVac, 13.8 kVac
- No distribution transformer is required
- High power density: 1.67 kW/L



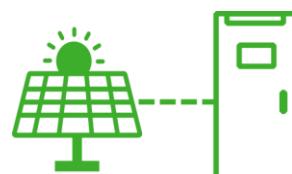
## Design for Data Centers

- Power delivered up to 1 MW to 10 MW
- Support a wide output voltage range 800-1500V



## Modular and Scalable System Design

- Easily configurable with multiple interconnected units
- Redundant configuration support for higher reliability



## Smart Solar Power Flow

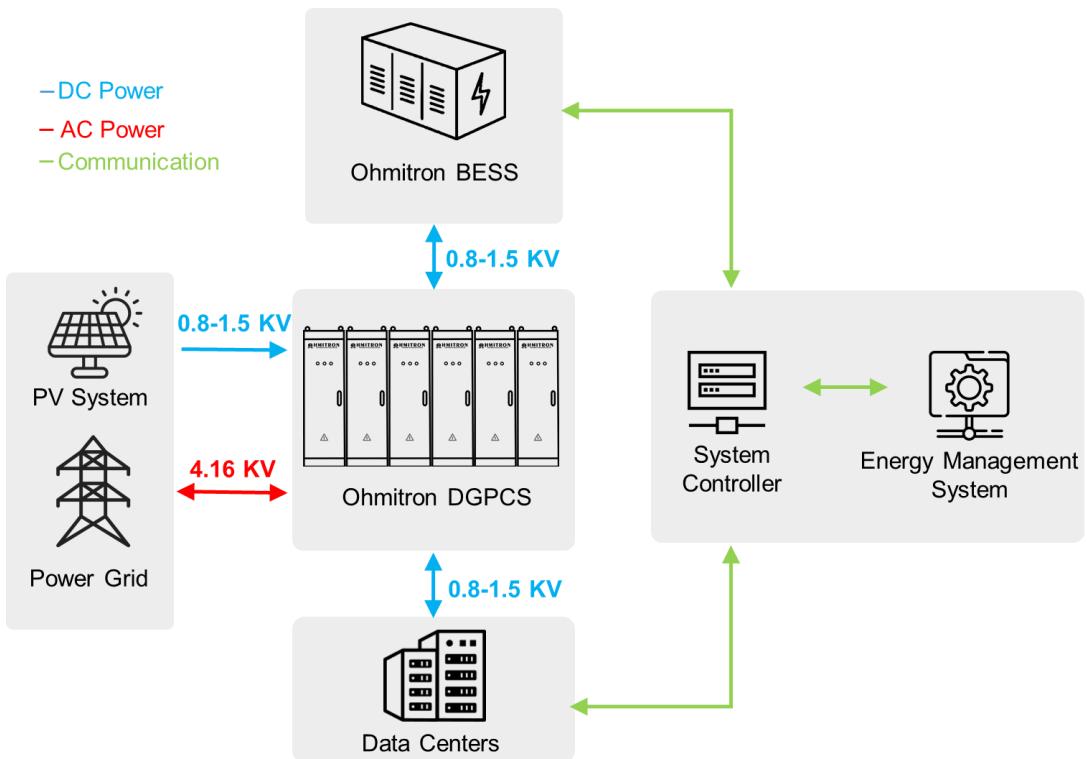
- Power delivered up to 10 MW
- Support a wide PV input voltage 800-1500V
- Powers BESS and the grid through smart control.



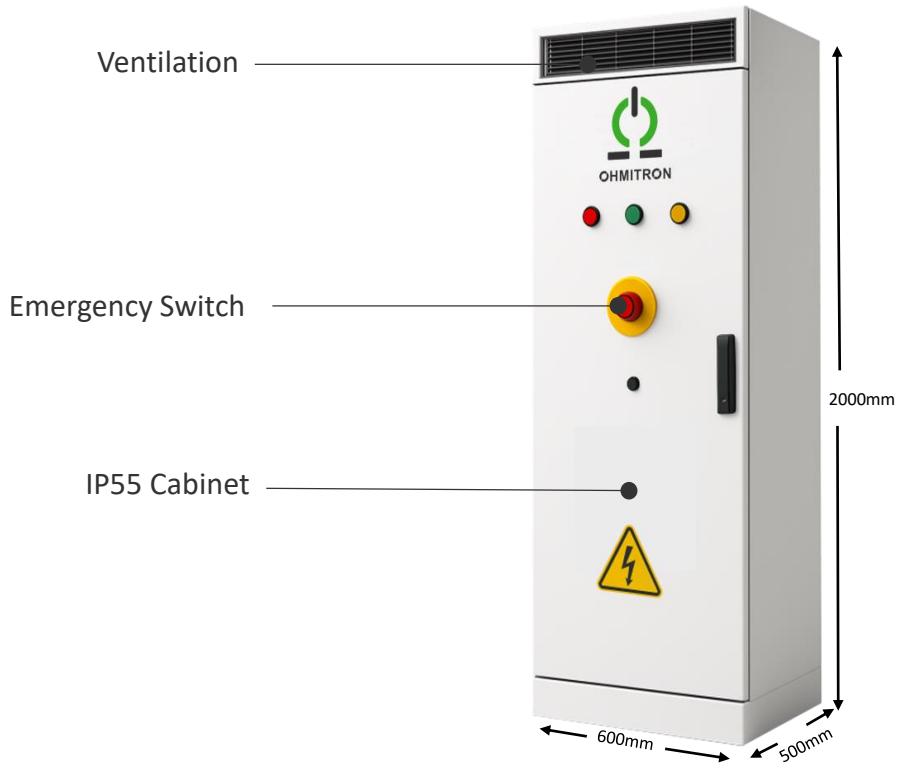
## Design for HV Battery Energy Storage System (BESS)

- Configure with 800V to 1500V BESS
- Both grid-tied mode and power backup mode operation
- Load shifting for time-of-use savings

# System Architecture



## 1 MW Power Cabinet



# System Specification

Distribution of Grid Power Conversion System			
Parameter	Unit	Specification	
Input Voltage	Input Voltage	k Vac	3Φ 4.16/13.8, ±15% (50/60Hz)
	Input Current Rating	A	Max: 200
	Max. Input Power	kVA	1050
	Connection/ Power Grid System		3P+ N+ PE
	Current THD	%	<3
	Power factor		>0.99
Performance	Standby Loss	W	<50
	Power conversion Efficiency	%	>97
DC Output	Output Voltage	V	Max: 1500   Min: 800
	Output Current	A	Max: 1500
PV Input	Input Voltage	V	Max: 1500   Min: 800
	Input Current	A	Max: 1500
HV BESS Input	Input Voltage	V	Max: 1500   Min: 800
	Input Current	A	Max: 1500
General	User Interface		LED, Button, Ethernet
	Net Weight	kg	600
	Communication		Optical fiber/Ethernet/Modbus TCP
	Dimension (W x D x H)	mm	600 x 500 x 2000
	Cooling		Liquid Cooling
	Protection		DC reverse protection/OVP/UVP/OCP/DC insulation detection
Environment	Protection rating		IP 55
	Operating temperature range	° C	-33 to 85
	Humidity	%	0 to 97 RH
	Acoustic Noise	dBA	Maximum < 70 @ 1 m
	Max. Altitude	m	4,000 , de-rating >2000
	Cooling		Liquid Cooling
Galvanic Isolation Input/Output	Isolation	kV	> 30 IEC 60071-1/ IEEE Std. C57.12.01
Integration	Bidirectional		Grid → Load, BESS ↔ all, PV ↔ all

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All information and specifications are subjected to change without prior notice.

