

Prisma STORAGE

250 kW Power Conversion System (PCS)

Prisma Storage is a modular power conversion system (PCS) designed to help you control and optimize your stored energy.

It is available as a standard pre-assembled cabinet (Power Conversion System, PCS) or as a Power Conversion Kit (PCK) for custom integration. This flexibility allows you to either deploy a ready-to-use solution or tailor the system to your specific installation needs.

Why energy storage?

- Maximize self-consumption from renewables
- · Shift loads and avoid peak demand charges
- Stabilize power supply in weak-grid or remote areas
- Access energy markets for new revenue streams
- Reduce energy costs and increase resilience

Key advantages

- Pre-assembled PCS or customizable PCK
- Compatible with all storage types: batteries, fuel cells, supercapacitors,...
- · Compact design for easy installation
- Single-phase, three-phase or mixed setup flexibility
- High efficiency for better battery management and longer lifespan
- Embedded supervision with Inview monitoring
- Scalable to match your growing energy needs

Compatible Modular Power Converters

Each Prisma Storage system can integrate up to six hot-swappable bidirectional modular power converters (MPC). The compatible module for this system is the PrismaBox 400 - 1DC/1AC - 750/400.



PrismaBox 400 - 1DC/1AC - 750/400.

AC1 In/Out Voltage (range)	3x400 Vac or 3x480Vac (260-537Vac)
DC2 In/Out Voltage (range)	750 Vdc (300-900 Vdc)
Power	42,5kW or 50kW
Form Factor	2RU, 27kg





Technical caracteristics

Mechanical & Environmental Specifications		
Part Number	A00055-V01	
Dimensions (W x H x D)	600x800x2100 mm	
Total weight	+/- 370 Kg	
Ingress Protection	IP20	
Cooling type	Fan forced cooling	
RoHS / Material (casing)	Compliant / Sheet Steel Powder Coated	
Operating T° / Relative Humidity (RH) non-condensing	-20°C to 40°C, power de-rating from 40°C to 65°C / Max RH 95% for 96 hours per year	
Storage T° / Relative Humidity (RH) non-condensing	-40°C to 70°C / Max RH 95%	
Terminal type and size	RB012 - 185mm²	
Maintenance access	All replaceable part accessible from the front	
General Electrical Specifications (system-level electrical performance)		
Total Power	250kW	
Number of power converters	Up to 6 PrismaBox	
Monitoring & Control	7 inches touchscreen Inview X+	
Peak efficiency (AC-DC or DC-AC)	> 98.5% at 50% load & nominal voltage	
Overload capacity	150% for 15 seconds	
Configuration / Neutral	Three Phase DELTA or STAR / TN-S, TN-C, TT	
AC 1 In/Out		
Nominal voltage (Power)	3x400 -3x480VAC (250kW)	
Voltage range (Line-Line)	3x260 Vac to 3x537 VAC (derating 3x260 to 355Vac)	
Power factor / THDi	> 0.99 / < 3%	
Frequency (Synchronization range)	50Hz or 60Hz (45 to 65Hz)	
AC output voltage stability (Inverter mode)	±1% from 10% to 100% load	
Static / Dynamic voltage regulation (Inverter mode)	$\pm1\%$ between 10% and 100% load / <5% from 0 to 100% to 0 load impact (100 ms)	
DC 2 In/Out		
Nominal voltage (Power)	750VDC (250kW)	
Voltage range	300 – 900VDC (power derating between 300 to 660VDC)	
Reverse polarity protection	Yes	
Standard compliance		
Electrical safety standard	IEC 62477-1, IEC 62109-1, IEC 62109-2, UL1741	
EMC/EMI	IEC61000-6-X/ FCC Part 15 classA / IEC61000-4-X	
Grid-Code	EN50549 VDE-AR-4105 AS4777 UL1741-SB IEEE1547	
Low voltage switch gear & control gear assemblies	IEC61439-2	
Integrated Protections (optionnal)		
AC side	Motorized MCCB 400A	
DC side	Contactor + Fuse 400A NH3-1000V	
DC Earth leakage protection	Bender MRCDB423-D-1	
Anti-islanding decoupling relay	Included ZHIEL UFR1001-E	

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