



# Prisma Storage

US PCS family - 250 kW to 2250 kW

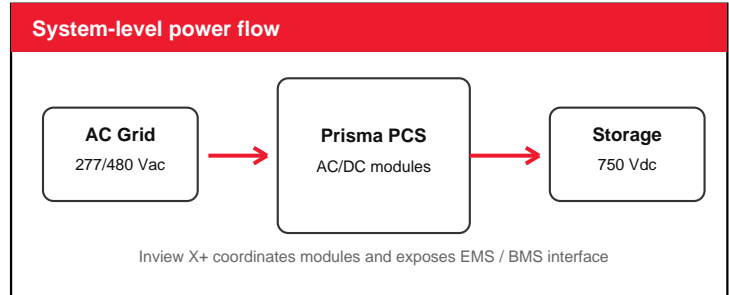
US reference edition | 277/480 Vac | 60 Hz | 750 Vdc storage bus

<p>AC IN/OUT <b>277/480 Vac</b> 3-phase, 60 Hz reference</p>	<p>DC IN/OUT <b>750 Vdc</b> 300-900 Vdc operating window</p>	<p>POWER RANGE <b>250-2250 kW</b> US reference configurations</p>	<p>MODULES <b>5-45 active</b> 50 kW hot-swappable blocks</p>
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## System overview

**Prisma Storage** is a modular bidirectional PCS for North American 277/480 Vac, 3-phase, 60 Hz storage and conversion projects. The family is built from hot-swappable 50 kW PrismaBox AC/DC modules and scales by module count from C&I; entry systems to multi-MW cabinet lineups.

Prisma connects a facility or grid AC bus to a nominal 750 Vdc storage bus, with Inview X+ supervision and a project-defined EMS/BMS interface. It can be delivered as a pre-assembled PCS or as a PCK kit for OEM integration.



## Reference family configurations

480 Vac reference; final cabinet dimensions, protection package, and certifications are released by configuration.

<p><b>250 kW</b> C&amp;I entry 5 active</p>	<p><b>750 kW</b> reference block 15 active</p>	<p><b>1500 kW</b> two blocks 30 active</p>	<p><b>2250 kW</b> three blocks 45 active</p>
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## Key advantages

<p><b>Modular service</b></p> <p>Capacity is created in 50 kW increments. Hot-swappable modules support fail-small operation and low MTTR.</p>	<p><b>Storage optimized</b></p> <p>Native 750 Vdc storage bus with 300-900 Vdc operating window. Full-rated power above approx. 650-660 Vdc at 480 Vac.</p>	<p><b>Integration ready</b></p> <p>Inview X+ provides local HMI and gateway functions. EMS/BMS command, permissive and alarm behavior is defined per project release.</p>
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## Application envelope

<b>Native fit</b>	480 Vac C&I BESS, peak shaving, renewable firming, resiliency and microgrids using a nominal 750 Vdc storage bus.
<b>Conditional fit</b>	Flow, flywheel, ultracap and hybrid DC assets when voltage, precharge, grounding and controls are engineered for Prisma.
<b>Not direct native fit</b>	1250-1500 Vdc battery corridors, direct EV fast-charger DC link architectures, or projects requiring inherent galvanic isolation from the PCS.

**Scope boundary**  
Prisma is the PCS platform. Battery modules, BMS, fire / gas systems, HVAC, MV equipment, site networking, and civil works remain project scope unless explicitly contracted.

### Technical characteristics

US 277/480 Vac reference. Values are preliminary planning numbers unless otherwise noted; final ordering codes and certification IDs are released by configuration package.

	250 kW	750 kW	1500 kW	2250 kW
<b>Mechanical &amp; Environmental Specifications</b>				
Reference / ordering code	A00055-V01	TBD - release package	TBD - release package	TBD - release package
Reference family role	C&I entry / 6-slot option	Default US building block	2 x 750 kW lineup	3 x 750 kW lineup
Dimensions (WxDxH)	600x800x2100 mm	Cabinet execution TBD	Multiple feeders / sections TBD	Bus duct or multi-section TBD
Total weight	+/- 370 kg	TBD	TBD	TBD
Ingress protection	IP20 indoor baseline; NEMA / sealed outdoor execution by configuration			
Cooling type	Forced air at module level; sealed outdoor requires HVAC / heat exchanger			
Operating T / RH non-condensing	-20 to +40 deg C full power reference; derating above +40; RH up to 95% non-condensing			
Altitude	<1500 m no derate; approx. 0.8% / 100 m above 1500 m; max 4000 m			
Terminal / landing class	RBO12 - 185 mm² reference	1200-1600 A class TBC	Multiple feeders or LV switchboard	Multiple feeders / bus duct
Maintenance access	Front access for replaceable modules and control components			
<b>General Electrical Specifications (system-level performance)</b>				
Total power	250 kW	750 kW	1500 kW	2250 kW
Active PrismaBox modules	5 active (6-slot option)	15	30	45
Monitoring & control	7-inch Inview X+ HMI / gateway; EMS-BMS point list by project			
Peak efficiency (AC-DC or DC-AC)	> 98.5% at approximately 50% load and nominal voltage			
Overload capacity	150% for 15 seconds			
Configuration / neutral	3-phase power stage; neutral / bonding handled at system level			
<b>AC 1 In/Out - 480 Vac Reference</b>				
Nominal voltage / power	3x277/480 Vac (250 kW)	3x277/480 Vac (750 kW)	3x277/480 Vac (1500 kW)	3x277/480 Vac (2250 kW)
Voltage range (line-line)	3x260 Vac to 3x537 Vac; current-limit derating at low voltage			
Power factor / THDI	PF > 0.99 at nominal conditions / THDI < 3% at nominal conditions			
Frequency (synchronization range)	50 Hz or 60 Hz; synchronization range 45 to 65 Hz			
Static / dynamic regulation	+/-1% static; <5% for 0-100-0 load step, approx. 100 ms recovery			
Nominal AC current @ 480 Vac	~301 A	~902 A	~1804 A	~2706 A
Max AC planning current	~354 A	~1062 A	~2124 A	~3186 A
<b>DC 1 In/Out</b>				
Nominal voltage	750 Vdc nominal storage bus			
Voltage range	300-900 Vdc; full 480 Vac power above approx. 650-660 Vdc			
Nominal DC current @ 750 Vdc	~333 A	~1000 A	~2000 A	~3000 A
Max DC planning current	~400 A	~1200 A	~2400 A	~3600 A
Reverse polarity protection	Yes			
DC safety note	Non-isolated topology requires project grounding, IMD, service isolation and LOTO concept			
<b>Standard Electrical Compliance / Project Applicability</b>				
Electrical safety standard	IEC 62477-1, IEC 62109-1/2, UL 1741 reference; certificate IDs by configuration			
EMC / EMI	IEC 61000-6-X Class A; FCC Part 15 Class A; IEC 61000-4-X			
Grid code	EN 50549, VDE-AR-N 4105, AS 4777, UL 1741-SB, IEEE 1547 by released firmware/configuration			
Low-voltage switchgear assemblies	IEC 61439-2 as applicable to cabinet-level assemblies			
<b>Integrated Protections / Options</b>				
AC side	Motorized MCCB 400 A reference	1200-1600 A class TBC	LV switchboard / feeders	LV switchboard / bus duct
DC side	Contactor + fuse 400 A NH3-1000 V reference	Branch protection + isolation TBC	Branch protection + isolation TBC	Branch protection + isolation TBC
DC earth leakage / IMD	Bender MRCD423-D-1 reference option; thresholds/actions by project			
Anti-islanding / grid relay	ZIEHL UFR1001-E option or external relay package as required			
Shared DC bus warning	DC contactor is not visible-break service isolation. Shared DC bus requires branch protection, precharge, voltage verification and LOTO isolation.			