www.pixii.com



PowerNode PCM 125

Power Conversion Module | 125kW

98.5

Peak efficiency of 98.5%, with an online rate of 99% and a utilization rate of 99%, providing exceptional efficiency and operational stability.

Ideal for microgrid and on-/off-grid enviroments with easy integration of renewable energy sources.

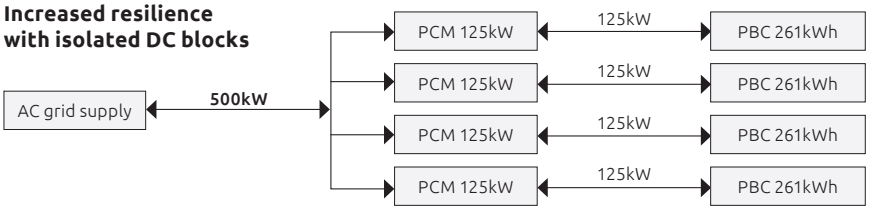
High efficiency bi-directional power conversion module for off-grid and microgrid applications.

The Pixii PCM 125 delivers high efficiency and stability. Its modular and flexible design supports various system configurations, while intelligent control and grid-friendly features ensure reliable and adaptable energy management with the Pixii Energy Architecht EMS.

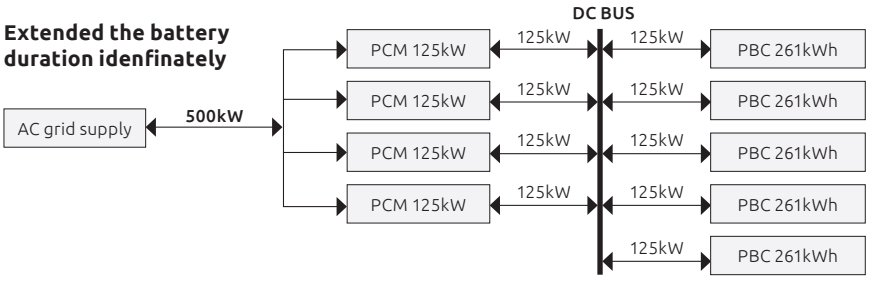
Stable, efficient, and versatile power performance

The Pixii PCM 125kW delivers clean, stable power even with grid distortion up to 20% THDu, maintaining current distortion below 3% THDi for high efficiency and reliability. It handles 100% unbalanced loads and direct-on-line motor starts with inrush currents up to 8× nominal, ensuring smooth off-grid performance. With modular, scalable design and robust construction, it integrates seamlessly into grid-tied, microgrid, off-grid, and hybrid systems.

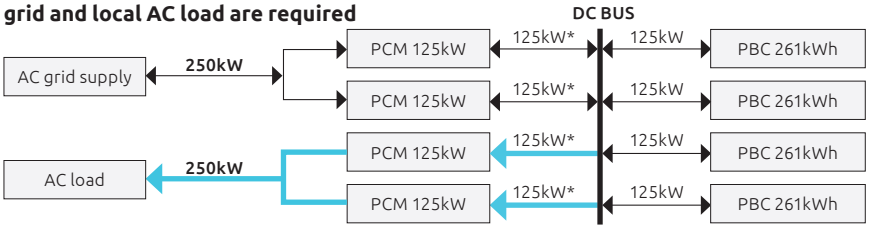
Increased resilience with isolated DC blocks



Extended the battery duration idenfinately



UPS/Microgrid where both import/export to grid and local AC load are required



*Combined battery load ≤ 400kW

Highlights

- High efficiency & fast response
- Flexible configurations
- Superior off-grid performance
- Global compliance

Typical applications

- Microgrids & islanded power networks
- Hybrid PV + BESS installations
- All-in-one outdoor BESS cabinets
- Utility-scale power conversion cabinets
- For large sites (125kW - multi MW)



The Energy Management System (EMS) is optimizing power infrastructure. Turning your battery energy storage into a profitable and flexible energy asset.

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PCM 125 Power Conversion Module, 125kW

AC specifications

Grid connection type	IT/TN
Phase config. (grid)	1ph/3ph
Wiring method	3 ph. 3-wire 3 ph. 4-wire
AC voltage (±15%)	230V L-N 400V L-L
Nominal frequency (grid)	50/60Hz
Nominal AC current @400Vac	200A
Nom. cont. AC power (±2%)	125kW
Overload rating (long term, 110%)[1]	137.5kW
Overload rating (1min, 120%)	150kW
Overload rating (150ms, 150%)	187.5kW
Max. apparent power	137.5kVA
Power factor[2]	-1 - +1
THDi (grid connection)	<3%
Off-grid operation support	Yes
Generator backup support	Yes
Phase config. (genset)	3ph
Frequency range (genset)	45 - 55Hz

1) Temperature limited
2) Full 4 quadrant operation

DC specifications

Operating voltage range (3-wire AC)	615 ~ 950Vdc
Operating voltage range (4-wire AC)	650 ~ 950Vdc
Max. DC current	203A

Efficiency

Max. efficiency	98.5%

Communication and connectivity

Wired interfaces	Ethernet LAN, RS 485, CAN

Safety

Ingress Protection (IP)	IP20
Overvoltage category (OVC)	Class III
Max. short-circuit current	297A @11ms

Operating conditions

Thermal management	Fan
Acustic noise @1m. distance	<65dB(A)
Operating temp. range[1]	-30 - +55°C
Operating rel. humidity[2]	0 - 95% NC
Max. operation altitude[3]	4000m

1) Derating from 45°C
2) Non-condensing
3) Derating >2000m

Physical specifications

Dimensions (HxWxD)(mm)	232x520x725
Net. weight	64.5 kg
Color	RAL 9005
Status indicator type	LED

Warranty and compliance

Security and safety standards
GB/T 34120-2017, GB/T 34133-2017,
IEC/EN 62477-1, IEC/EN 62116, IEC/EN 62109-1

Grid standards[1]
AS/NZS 4777.2 (AU+NZ), VDE-AR-N 4105 (DE),
VDE-AR-N 4110 (DE), VDE-AR-V 0124-100 (DE),
VDE-AR-V 4120 (DE),
IEC/EN50549-1 Type A & B (EU),
EREC G99 Type A & B (UK),
EREC G99 Type C & D Upgrade (UK),
UNE 217001 (ES), UNE 217002 (ES)

EMC standards
IEC/EN 61000-6-1, IEC/EN 61000-6-2,
IEC/EN 61000-6-3, IEC/EN 61000-6-4

Standard warranty[2]	5 years[2]

1) Designed in accordance with the relevant national and international standards listed above. Certification to specific revisions available on request. Additional local requirements may apply.

*2) Warranty terms may vary based on your SLA agreement. Please review the **warranty document** for details.*

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