



Energy Storage Solution

Power Conditioning System / PCS125

- 125 kW power capacity with 480 V_{AC}
- Scalable system configuration and integration with mainstream battery systems
- Black start capability for power backup and microgrid applications



Commercial
Building



Charging
Station



Campus



Factory



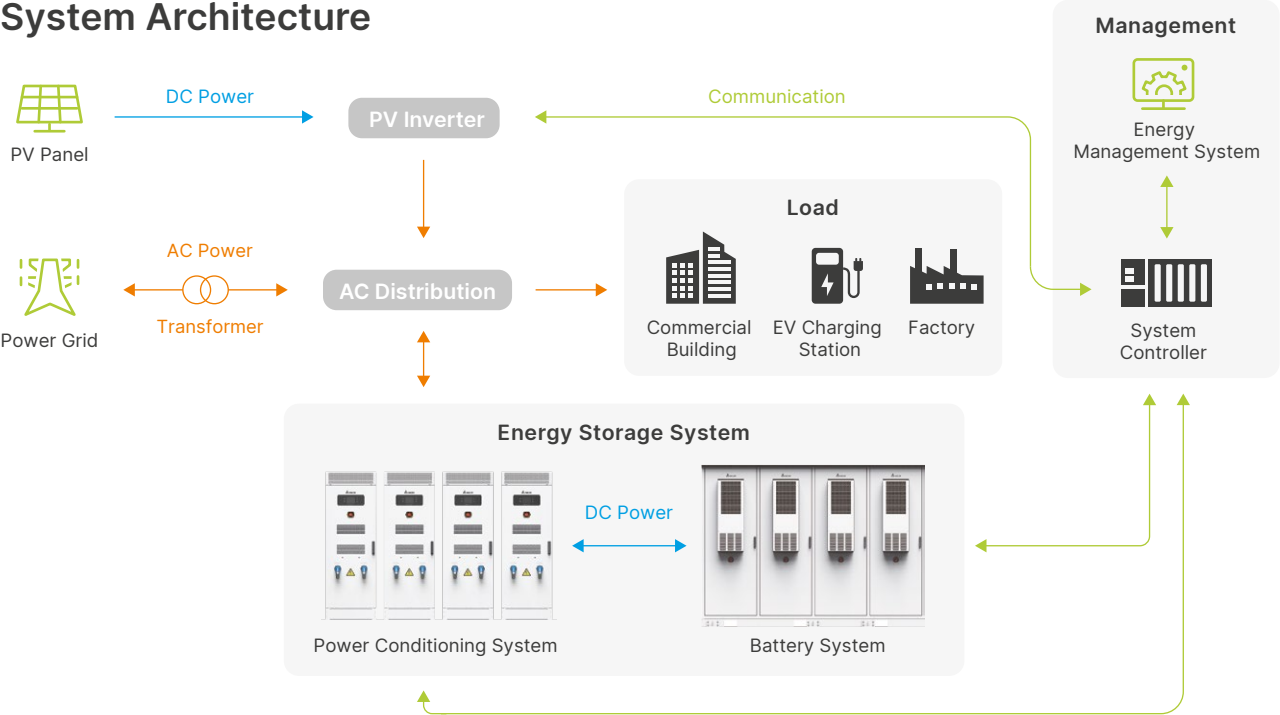
The Leading Power for Energy Storage

Delta Power Conditioning System (PCS) is a bi-directional energy storage inverter for grid-tied and off-grid applications including power backup, peak shaving, load shifting, PV self-consumption, PV smoothing and etc. It demonstrates industry leading power performance with

high power efficiency and low stand-by power loss. It is compact for space saving and offers scalability for various system configurations and integration with mainstream branded battery systems.



System Architecture

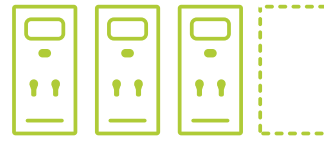


Features



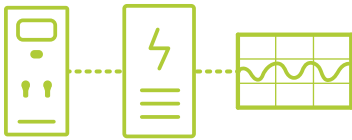
Efficient and Precise Power Control

- Power capacity: 125 kW
- AC voltage: 480 Vac
- Efficiency: peak 97.6%, CEC 97.0%
- High power density: 147 W/l, 403 W/kg
- Quick power response time : <40 ms



Flexible System Configuration

- Scalable with multiple units in a configuration
- Integrable with mainstream battery systems



Designed for Energy Storage Applications

- Real / reactive power compensation to improve power quality
- Peak shaving / demand charge management
- Load shifting for time-of-use savings
- Black start capability for power backup and microgrid applications
- Standalone operation for power backup



Product at a Glance



Specifications

Model Name	PCS125
AC Grid Connection	
Rated Grid Voltage	480 Vac, 3P3W
Grid Voltage Range	422.4 to 528 Vac (-12%, +10%)
Rated Grid Frequency	60 Hz (50 Hz optional)
Frequency Range	59.3 to 60.5 Hz, adjustable
Rated AC Power / Current	125 k VA / 150.4 A
Max. Continuous AC Current	167 Arms
Current THD	< 5% (IEEE 1547 Compliant)
Power Factor	-1 to 1, continuously adjustable
DC Connection	
Voltage Range	750 ~ 1,000 Vdc ¹⁾
Rated Voltage	900 Vdc
Rated Discharge / Charge Power	129 kW / 122 kW
Max. Discharge / Charge Current	172 A / 163 A
Standalone Operation	
Rated Output Voltage	480 Vac, 3P3W
Rated Output Power	125 kVA / 125 kW with linear load; 100 kVA with RCD load (CF _≤ 2) ²⁾
Rated Output Current	150.4 A with linear load; 120 A with RCD load
Power Factor	0.8 ~ 1
Output Voltage THD	< 3% @ linear load < 5% @ RCD load (CF _≤ 2)
Performance	
Peak / CEC Efficiency	97.6% / 97.0%
Standby Loss	< 25W @ sleep mode
Environmental	
Max. Altitude	3,000 m, de-rating above 2,000 m
Operating Temperature	-25 ~ 60 °C, de-rating @ > 50°C
Humidity	0 to 95% RH, non-condensing
Acoustic Noise	< 72 dBA @ 1 m @ rated condition
Cooling	Forced air with speed control
Enclosure Rating	Type 3R, IP55
General	
User Interface	4.9" LCD screen
Emergency Stop	EPO button & remote control
Communication	Ethernet/Modbus TCP , RS-485/Modbus RTU(optional)
Dimension (W x H x D)	23.6" x 69.5" x 31.5"
Net Weight	683 lbs
Certificate	UL1741, UL 1741 SA (Rule 21), IEEE1547, FCC part 15 class A, CSA C22.2 No. 107.1-01, HECO Listed, CEC Listed
Applicable Battery Chemistry	Lithium-ion, lead-acid, flow battery

1) DC Voltage should be higher than 800V to support HVRT

2) Transformer or motor load, which has large inrush current (CF>2) is not included

* Specifications are subject to change without prior notice

* If a transformer is required to be added between PCS and load, D type of transformer must be on PCS side.



Delta Electronics (Thailand) PCL.

909 Soi 9, Moo 4, Bangpoo Industrial Estate(E.P.Z), Pattana 1 Rd.,
T.Prakasa, A.Muang, Samutprakan 10280 Thailand
TEL : +66 (0)2 709 2800 / FAX : +66 (0)2 709 3200

More information

www.DeltaThailand.com



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