



Storage Systems

BATTERY STORAGE KIT INDOOR BSI 50-176/109-872



- **Pre-configured indoor battery storage kit**
- **Easy installation and commissioning**
- **EMS and Battery inverter 50K or 88K**
- **Modular battery racks for capacity stacking**
- **Combiner rack for easy installation of parallel racks**



- **Commercial and Industrial Buildings** – Peak Shaving, Time of Use, Self-consumption optimisation
- **Buffer storage for EV fast charging** – increasing the usable output
- **Agricultural buildings** – use of PV electricity after end of subsidies
- **Urban storage or new buildings** – reducing the load on the transformer



- **Pramac Storage Systems** – leading supplier of power electronics
- **Proven technology** – For a wide range of battery applications
- **Strong team** – with a global partner
- **Reliable energy storage solutions** – Indoor / Outdoor / Container



BATTERY STORAGE KIT INDOOR BSI



TECHNICAL DATA		BSI /109	BSI /218	BSI /327	BSI /436	BSI /654	BSI /872
Total capacity (kWh)		109	218	327	436	654	872
Net capacity (kWh) (90% DoD)		98	196	294	392	589	785
Rated voltage (Vdc)		736					
Max. Charge/discharge current (A)		148					
Max. C-rate		1C					
Cell type		Li-Ion (LFP) Pouch					
Cycles @ 90% DoD 65% SoH 0,5C/0,5C		7300					
Battery efficiency (%) @ 0,5C		96					
Storage temperature (°C)		-20 to +60					
Working temperature (°C)		+10 to +40					
Humidity (% RH)		5-95, non condensing					
Max. permissible installation height (m)		2000					
Weight	Rack, assembled (kg)	1250	2x1250	3x1250	4x1250	6x1250	8x1250
	Module (kg)	48					
		1x	2x	3x	4x	6x	8x
Dimensions (WxDxH, mm)		(815x659x2130)	(815x659x2130)	(815x659x2130)	(815x659x2130)	(815x659x2130)	(815x659x2130)
Protection class		IP20					
Communication		RJ45 (Ethernet)					
Certificates / Approvals		CE / UN 38.3 / IEC 62619 / IEC 63056 / UL 1973 / UL 9540A / VDE 2510-50 / EN 61000-6-2 / EN 61000-6-4					

Warranty

5 years product warranty
10 years performance guarantee

All certificates are available online at www.pramac-storage-systems.com

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TECHNICAL DATA BATTERY INVERTER 50K/88K	PBI 50K-PC – 421P050.110	PBI 88K-PC – 421P100.110
Rated power (kW)	50	88
AC working range min. - max. (V)	180 ... 528	
Maximum AC current (A)	128	
AC grid connection	3P, PE / TT, TN-C, TN-S	
Rated voltage (Vac)	380 / 400 / 415	
Rated frequency (Hz)	50	
THDi (%)	< 3	
AC power factor / range	1 / 0,3i ... 0,3c	
Max. Efficiency (%)	98,6	
Operating temperature range (°C)	-25 to +60	
Cooling	Smart active cooling	
Weight (kg) Inverter only	69	
Topology	Transformerless	
Noise emission (dB(A))	< 70	
Certification / Approvals	EU Directives	2014/30/EU / 2014/35/EU / 2011/65/EU
	Battery inverter	IEC 62109-1 / IEC 62109-2 / IEC 62116 / IEC 61727 / IEC 62477-1 / IEC 61439-1 / IEC 61439-2
Approvals	EMC	EN 61000-6-2 / EN 61000-6-4 / EN 61000-3-12 / EN 61000-3-11
	Grid connection conditions	DIN VDE V 0126-1-1 / VDE AR-N 4105:2018 / VDE AR-N 4110:2018 / TOR Erzeuger Typ A / UTE C15-712-1 VFR 2019 / G99 / EN 50549-1/-2

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TECHNICAL DATA COMBINER RACK	Single ZY000A00004	Dual ZY000A00005
Space for inverter	1	2
Space for Master-BMS	1	2
+/-DC-Rack connection	4x(DC+/-)	8x(DC+/-)
AC connection terminal area (L1/L2/L3/PE)	4x35-70mm ²	8x35-70mm ²
AC auxiliary power supply (L1/N/PE)	0,75-2,5mm ²	
Protection class	IP20	
Weight (kg) without inverter	165	185
Dimensions (W×D×H, mm)	800×800×2200	

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TECHNICAL DATA ENERGY-MANAGEMENT-SYSTEM		Pramac Smart Energy Controller (PSEC) ZY000A00011 PSEC-DMXX	
Voltage supply (Vdc)		<ul style="list-style-type: none"> • 10-24 • UPS for controlled shutdown and recovery 	
Connectors	USB	V 2.0 Micro-USB AB (OTG-Flash-Port) V 2.0 USB-A (Host Port)	
	LAN	2× RJ45 with 10/100 Mhz Dedicated MAC addresses for OT/IT use	
	IoT	1× Internal bus connection module Digital-IO 1× Internal bus connection module RS485	
Working temperature range (°C)		-25 to +60	
Humidity range (% RH)		5-95 (non-condensing)	
Case		DIN Rail Case 6TE with low profile	
Basic functions		<ul style="list-style-type: none"> • Self-consumption optimization • Peak load shaving • Time-based charging/discharging 	
Extended functions		<ul style="list-style-type: none"> • Simple management of charging stations • Load management and prioritisation for charging points 	

TECHNICAL DATA SMART METER		Acrel ADL3000-E* ZY000A00002	
Voltage	Reference voltage	3×380 V, 3×220/380 V	
Current	Input current	3×1(6) A, 3×1(6) A (Passive current transformer), 3×10(80) A	
Power		Active, reactive, apparent power, error ±0,5 %	
Communication		RS485 (Modbus RTU)	
Conductor cross-section voltage measurement min/max (mm²)		2,5/16	
Mounting		DIN rail	
Dimension (W×D×H, mm)		126×88×69	

*Current transformer and fuse protection voltage measurement not included in the scope of delivery