



Storage Systems

BATTERY STORAGE KIT INDOOR BSI PRO 90/109-436



- **Pre-configured indoor battery storage kit** - ON/OFF-Grid capable
- **On-Grid 90kVA / 75kVA backup power (120% overload)**
- **Phase unbalance up to 20kVA (transformerless)**
- **Diode load (up to 1kW)**
- **On/off grid switching ≤ 5 s** – Local switch box to ensure grid switching
- **Simple and fast installation / commissioning**
- **Modular battery racks for easy capacity expansion**
- **High security due to state-of-the-art SW architecture** – encrypted communication, digital cloud twin and 2-factor authentication



- **Higher added value** – by reducing operational downtimes
- **Autonomous energy supply** – supplying critical infrastructure
- **Self-sufficiency in remote areas**
- **Supports the use cases** – Self Consumption / Charging solutions / Energy Trading / Peak shaving / Multi-Use / Time of Use (ToU) / Grid Services



- **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



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TECHNICAL DATA		BSI PRO 90/109	BSI PRO 90/218	BSI PRO 90/327	BSI PRO 90/436
Total capacity (kWh)		109	218	327	436
Net capacity (kWh) (90% DoD)		98	196	294	392
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 1C/1C		7.300			
Storage temperature (°C)		-20 to +60			
Working temperature (°C)		+10 to +40			
Humidity (% , RH)		5-95, non condensing			
Max. permissible installation height (m)		2.000			
Weight	Rack, assembled (kg)	1250	2×1250	3×1250	4×1250
	Module (kg)	48			
Dimensions (WxDxH, mm)		1× (815×659× 2130)	2× (815×659× 2130)	3× (815×659× 2130)	4× (815×659× 2130)
Protection type		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 warranty			

* For details, see current warranty conditions at www.pramac.com

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TECHNICAL DATA BATTERY INVERTER		PBI 90K-BU – 423P090
Rated apparent power (kVA)		90 (ON-Grid) / 75 (Backup)
Max. permissible phase unbalance (kVA)		20
Maximum AC current (A)		130
Max. peak current (A)		185
AC grid connection		3P, N, PE / TT, TN-C-S
Rated voltage (Vac)		400
Rated frequency (Hz)		50
THDi (%)		< 3
AC power factor (cos PHI) / range		1 / 0i ... 0c
Max. Efficiency (%)		98,4
Switchover time (s)		< 5
Working temperature (°C)		-25 to +60
Cooling		Intelligent active cooling
Weight (kg) inverter only		71
Topology		Transformerless
Noise emission (dB(A))		< 70
Certification / Approvals	EU Directives	2014/30/EU / 2014/35/EU / 2011/65/EU / 2015/863/EU
	Safety Battery Inverter	IEC 62109-1 / IEC 62109-2 / IEC 62477-1 / IEC 61439-1 / IEC 61439-2
	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 4110:2023 / TOR Stromerzeugungsanlagen Typ A/B / C10/11 / G99 / CEI 0-16, CEI 0-21 / NTS 631, UNE 217002 / EN 50549-1/-2

All certificates are available online at www.pramac.com

TECHNICAL DATA COMBINER RACK PRO		CombinerRack Dual PRO (CR-Dual PRO)
Space for Inverter		2
Space for Master-BMS		2
±-DC-Rack connection		8×(DC±/-)
AC connection terminal area (L1/L2/L3/N/PE)		10×35-70mm ²
AC auxiliary power supply (L1/N/PE)		0,75-2,5mm ²
USV 24Vdc + Batt. (Ah)		4
Protection type		IP20
Weight (kg) without Inverter		185
Dimensions (W×D×H, mm)		800×800×2200

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TECHNICAL DATA	PRAMAC SMART TRANSFER SWITCH (PSTS) ZG311T00000
Rated current @400 V (A)	315
Number of poles	4-pole (L1, L2, L3, N)
Short-time current withstand capability (kA)	25
Terminal bolt size	M10×30
Protection class	I
Overvoltage category	III
Mounting / Assembly	Floor or wall (Indoor)
Perm. rel. humidity (%)	5-95, non-condensing
Dimensions (W×H×D, mm)	600 × 1100 × 400
Working temperature (°C)	0 to +35
Weight (kg)	80

Pramac Smart Energy Controller (PSEC) PSEC-DDMM

Basic functions



Monitoring – visualization of energy flows & 24/7 historical data



Local & Cloud access



Operations management



Peak shaving



Self-consumption optimization



Time-of-Use



Multi-Use

Interfaces



REST (Cloud & Local), Modbus TCP

Compatible with

Charging stations

EnerCharge | Wallbox | Alpitronic | Mennekes | ABL
| Cubos | i-charging

Energy meter / Data logger

Janitza | Acrel | Carlo Gavazzi / SMA | Solar-Log | SunGrow

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