



Storage Systems

BATTERY STORAGE OUTDOOR BSO MAX-Series



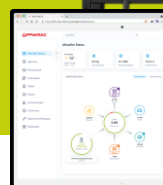
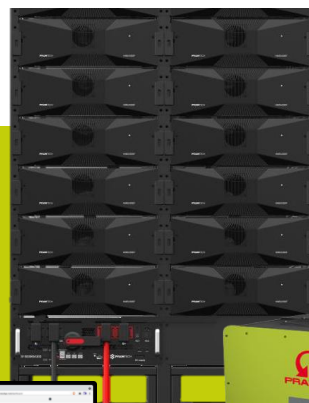
- **All-in-one battery storage system in a IP54 outdoor cabinet**
- **On-Grid 90kVA / 75kVA backup power (120% overload)**
- **Side-by-side installation for modular expansion**
- **Easy & quick installation** – components pre-installed
- **High safety standard** – smoke/heat-sensors, Aerosol exting. system, water pipe connector
- **Redundant air conditioning units for optimum cooling and heating**



- **Commercial and Industrial Buildings** – Peak shaving, Self-consumption, Time of Use, Multi-Use, Energy Trading
- **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 OUTDOOR BSO MAX



TECHNICAL DATA	BSO MAX 90/188	BSO MAX PRO 90/188
Rated apparent Power (kVA)	90	90 (On-Grid) / 75 (Backup)
Rated Capacity (kWh)	188	
Max. C-Rate	0,5C	
Celltype	Li-Ion (LFP) Prismatic	
Cycles	7.300 @ 90% DoD 65% SoH	
AC Grid connection	3P, N, PE / TT / TN-C-S	
Rated voltage (Vac)	400	
Rated frequency (Hz)	50	
Max. AC current (A)	130	
THDi (%)	1 / 0i...0c	
Max. peak current (A)	-	185
Max. permissible phase unbalance (kVA)	-	20
SAFETY DEVICES		
Active device	Permanent monitoring of the Battery cells	
	Smoke-sensor	
	Heat-sensor	
	Fire extinguisher Aerosol FP200S	
Passive device	Water pipe connector DN65	
	Overpressure flap	

BATTERY STORAGE OUTDOOR BSO MAX



GENERAL DATA	BSO MAX 90/188 ZB900T4A000	BSO MAX PRO 90/188 ZB900T4A020
Dimensions (L×W×H, mm)	1.300×1.354×2.387	
Cooling system	Air cooling/heating on battery side Active ventilation on inverter side	
Cooling Power (kW)	2×1,5	
RTE (%)	92,7	
AC Main grid connection	3P, N, PE / TN-C-S	
Insulation	Rock wool	
Weight System (t)	2,6	
Noise Emission @1m (dB(A))	< 69	
RTE (%)	~ 93	
Protection type	IP54	
Anti-Corrosion	C4M	
Working temp. range (°C)	-20 to +50	
Max. permissible installation height (m)	3.000	
Interfaces	RJ45 (Ethernet)	
Warranty	10 years product and performance warranty	
Certification Battery	CE / UKCA / UN 38.3 / UN 3481 / IEC 62619 / UL 1973 / UL 9540A / VDE 2510-50 / IEC 61000-6-2 / IEC 61000-6-4	
Certification Inverter	IEC 62109-1 / IEC 62109-2 / IEC 62477-1 / IEC 61439-1 / IEC 61439-2	
EU-Directives	2014/30/EU / 2014/35/EU / 2011/65/EU / 2015/863/EU	
Grid connection conditions	DIN VDE V 0126-1-1 / VDE AR-N 4105:2018 / VDE AR-N 4110:2023 / C10/C11 / G99/1-9 / TOR Erzeuger Typ A/B / CEI 0-16, CEI 0-21 / EN 50549-1/-2 / AS4777.2 / NTS 631, UNE 27002	

BSO MAX **PRO** requires accessory product ZY000A00021

BATTERY STORAGE OUTDOOR BSO MAX

PRAMAC SMART ENERGY CONTROLLER (PSEC)

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 | Alpitronic | Mennekes | Wallbox

Energy meter / Data logger

Janitza | Acrel | Carlo Gavazzi / SMA

ACCESSORIES TECHNICAL DATA

PRAMAC SMART TRANSFER SWITCH (PSTS) ZY000A00021

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

Text and illustrations correspond to the technical status at the time of printing. We reserve the right to make technical changes. No liability for printing errors. The current version replaces all previous versions. You can find the latest version at www.pramac.com