

ATON
GREEN STORAGE



Z.STORE



Data Sheet

Rev. 1.06

Date	Revision	Note	Signature
24/07/2018	1.00	Draft	A.L.
25/10/2018	1.01	Battery nominal voltage to 51,2 for inverter section	M.N.
26/11/2018	1.02	Effective charge / discharge power	M.G.
29/07/2021	1.03	Double paragraph Battery removal	A.S.
16/02/2022	1.04	Domain change	I.B.
15/07/2022	1.05	US5000 Battery	I.B.
22/11/2023	1.06	BST e ATON Batteries	I.B.

Inverter Technical Data

Model	ATZ3K	ATZ4K	ATZ5K
AC Output Grid Line			
Type of power supply	Sinusoidal single phase		
Nominal output power to utility grid [VA]	3000	3680	4600
Nominal input power from utility grid [VA]	3000	3680	4600
Max. output apparent power to utility grid [VA]	3000	3680	4600
Max. input apparent power from utility grid [VA]	6000	7360	9200
Minimum number of batteries to reach the nominal power [n]	2	3	3
Nominal voltage [V]	230		
Nominal frequency [Hz]	50/60		
Max. output current [A]	14	16	20
Max. input current [A]	28	32	40
Output power factor	0,8 leading 0,8 lagging		
Output THDi (at Nominal output power)	<3%		
AC Output EPS Line			
Type of power supply	Sinusoidal single phase		
Max. output apparent power [VA]	3000	3680	4600
Peak output apparent power (10sec) [VA]*	3600	4416	5500
Nominal output voltage [V]	230 (+/-2%)		
Nominal output frequency [Hz]	50/60 (+/-0.2%)		
Max. output current [A]	13,1	16,0	22,8
Output THDi (at Linear Load)	<3%		
Battery			
Type	LiFePO4/Pb		
Nominal voltage [V]	48 – 51,2		
Max. charging current [A]	62,5	75	100
Max. discharging current [A]	62,5	75	100
Max. number of battery modules	16 US5000/Aton batteries 15 BST batteries 32 US2000B/C batteries		
Maximum permissible energy at maximum capacity [kWh]	76,8		
Efficiency			
Max. efficiency	97,6%		
Max. battery to load efficiency	94,5%		
Europe efficiency	97,0%		

Protection	
Anti-islanding	Yes
Output overcurrent protection	Yes
Output shortcircuit protection	Yes
Output overvoltage protection	Yes
Overtemperature protection	Yes
AC lines protection	No
Battery protection	Magneto-thermal breaker
General Data	
Working temperature range for normal functioning [°C]	from -25 to +60
Inverter type	HF insulated
Relative humidity	0 % ÷ 95 %
Maximum altitude [m]	< 4000
Cooling	Natural convection
Noise [dB]	< 25
Weight inverter [Kg]	18
Dimension inverter section (Width x Depth x Height) [mm]	347x175x432
Mounting	Wall bracket
Protection degree	IP20
Pollution degree	3
Installation	Indoor
Overvoltage category AC sides	III
Tightening torque for electrical clamps [Nm]	1,7
Certifications & Standards	
Certifications	CE, CEI0-21, VDE-AR-N4105, ERDF-NOI-RES_13E, VDE 0124-0126
Safety regulation	IEC/EN62109-1&2, IEC62040-1
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4

Note:

- (1): AC power equal to 1900 W charging for each 2,4 kWh battery. AC power equal to 2700 charging for each 4,8kWh battery. Check n. minimum batteries to reach nominal power.
- (2): AC power equal to 1550 W discharging for each 2,4 kWh battery. AC power equal to 2250 W discharging for each 4,8 kWh battery. Check n. minimum batteries to reach nominal power
- (3): It can be limited by the inverter and / or the BMS

Battery Technical Data - 2,4kWh batteries

Model	SBATLIT94A-48V
Battery	
Battery type	LiFePO4
Made by	Pylontech
Model	US2000B/C
Nominal voltage [V]	48
Max. permissible energy [kWh]	2,4
Max. charge current [A]	35 ⁽³⁾
Max. discharge current [A]	35 ⁽³⁾
DoD [%]	80%
Minimum number of working cycles @ 25°C, DoD 80%	4000
General Data	
Working temperature range in charge [°C]	from 0 to +50
Working temperature range in discharge [°C]	from -10 to +50
Relative humidity	5 % ÷ 95 %
Maximum altitude [m]	< 4000
Cooling	Natural convection
Noise [dB]	< 25
Weight [Kg]	24
Dimension (Width x Depth x Height) [mm]	483x435x89
Mounting	Rack 19"
Protection degree	IP20
Pollution degree	3
Installation	Indoor
Certificazioni	
Certifications	CE, TÜV/IEC62619
Transport regulation	UN38.3

Note:

(3): Can be limited by the inverter and/or the BMS

Model of casing	WALL-BOX-B	WALL-BOX-D
Max. Number of batteries	2 x US2000B	4 x US2000B
Dimension (Width x Depth x Height) [mm]	500x200x485	513x405x522
Weight without batteries [Kg]	14	14

Battery Technical Data – 4,8kWh batteries

Model	SBATLIT100A-48V	MD48-100-3U	AL48-100-3U
Battery			
Battery type	LiFePO4		
Made by	Pylontech	BST	ATON
Model	US5000	MD48-100-3U	AL48-100-3U
Nominal voltage [V]	48		
Max. permissible energy [kWh]	4,8		
Max. charge current [A]	50 ⁽³⁾		
Max. discharge current [A]	50 ⁽³⁾	100 ⁽³⁾	
DoD [%]	80%		
Minimum number of working cycles @ 25°C, DoD 80%	4000		
General Data			
Working temperature range in charge [°C]	from 0 to +50		from 15 to +55
Working temperature range in discharge [°C]	from -10 to +50	from -20 to +55	from 0 to +55
Relative humidity	5 % ÷ 95 %	20 % ÷ 90 %	5 % ÷ 95 %
Maximum altitude [m]	< 4000		≤2000
Cooling	Natural convection (Fanless)		
Noise [dB]	< 25		
Weight [Kg]	39,7	42	37
Dimension (Width x Depth x Height) [mm]	442x420x161	442x420x133	442x420x132
Mountig	Rack 19"		
Protection degree	IP20		
Pollution degree	3		
Installation	Indoor		
Certificazioni			
Certifications	CE, TÜV/IEC62619		
Transport regulation	UN38.3		

Note:

(3): Can be limited by the inverter and/or the BMS

Model of casing	WALL-BOX-C	WALL-BOX-D
Max. Number of batteries	1 x US5000 2 x MD48-100-3U 2 x AL48-100-3U	2
Dimension (Width x Depth x Height) [mm]	500x200x530	513x405x522
Weight without batteries [Kg]	13	14

Control Technical Data

Model	ATZ-BOX
Operator interface	
Internal display (only for the installer)	Graphic 128x64 backlit
Keyboard (only for the installer)	4 key
On board signal Led [nr.]	3
Communication interface	
WiFi (standard)	2.4 GHz IEEE Std. 802.11 b/g
GPRS (opzional)	2G Dual band
LAN (opzional)	10/100 Mbps
Local / remote communication to network operators, distributors, aggregators, etc... (opzional)	Yes
Communication in agreement with EN61850 (predisposition)	Yes
General Data	
Operate temperature range [°C]	from -25 to +60
Relative humidity	0 % ÷ 95 %
Maximum altitude [m]	< 4000
Cooling	Natural Convection
Noise [dB]	< 25
Weight [Kg]	5,5
Dimension (Width x Depth x Height) [mm]	347x135x275
Mounting	Fixed to inverter
Dimension with inverter (Width x Depth x Height) [mm]	347x175x665
Weight with inverter [Kg]	23,5
Protection degree	IP20
Pollution degree	3
Installation	Indoor
Certification	
Certification	CE