M.STORE

Data Sheet

Rev. 1.07

Date	Revision	Note	Signature
21/03/2018	1.00	Draft	A.L.
09/04/2018	1.01	Update	A.F.
24/05/2018	1.02	Insert of 4 Kw inverter size Insert size box 3 batteries	M.N.
05/07/2021	1.03	Update	A.L.
24/07/2021	1.04	Update	A.L.
09/08/2021	1.05	Fix AC Output Grid Line	M.M.
16/02/2022	1.06	Domain change	I.B.
08/09/2022	1.07	Insert of US5000 batteries	I.B.

ATON GREEN STORAGE S. p. A. - Sede Legale: Via Circonvallazione Nuova, 57/b - 47923 Rimini (RN)
Sede Operat. ed Amministrat.: Via Guido Rossa, 5 - 41057 Spilamberto (MO) Tel: +39 059783939 Fax: +39 059784323
E-mail: info@atonstorage.com - Sito web: www.atonstorage.com

Inverter Technical Data

Model	ATM-3K-TLS	ATM-4K-TL	ATM-5K-TL
DC PV Input			
Max. DC input power [W]	3900	4600	6500
No. Of indipendent string	1	2	2
Max. DC input voltage [V]		550	
MPP range [V]		100-500	
Startup Voltage [V]		125	
Max. DC input current [A]	11	11/11	11/11
Max. DC short circuit current [A]	13,8	13,8/13,8	13,8/13,8
AC Output Grid Line			
Type of power supply		Sinusoidal single phase	
Max. output power to utility grid [W]	3000	3680	5000
Max. output apparent power to utility grid [VA]	3300	4050	5100
Nominal output voltage [V]		230	
Nominal output frequency [Hz]		50/60	
Max. output current to utility grid [A]	13,6	16,0	22,8
Output THDi (at Nominal output power)	<3%	<3%	<3%
Output power factor		0,8 leading 0,8 lagging	
AC Output EPS Line			
Type of power supply		Sinusoidal single phase	
Max. output apparent power [VA]	2300	2300	2300
Peak output apparent power (10sec) [VA]*	3500	3500	3500
Nominal output voltage [V]		230	
Nominal output frequency [Hz]		50/60	
Nominal output current [A]	10	10	10
Output THDi (at Linear Load)		<3%	
Switching electrical panel Grid/EPS		Opzionale	
Battery			
Type		LiFePO4	
Nominal voltage [V]		48	
Max. charging current [A]		50	
Max. discharging current [A]		50	
Min. number of battery modules		0	
Max. number of battery modules		16	
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
PV string input reverse polarity protection	Yes
Insulation resistor detection	Yes
Residual current monitorin unit	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 [Kg]	17
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
Overvoltage category DC side	II
Tightening torque for electrical clamps [Nm]	1,7
Use with amorphous solar panel	Forbidden
External protections required on the PV generator side (DC side)	SPD
Min. insulation resistance to ground of the string (Test voltage: 1000 Vdc) [MΩ]	1

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

Battery Technical Data

Model	SBATLIT94A-48V	SBATLIT100A-48V
Battery		
Battery type	LiFePO4	
Made by	Pylontech	
Model	US2000B/C	US5000
Nominal voltage [V]	48	48
Max. permissible energy [kWh]	2,4	4,8
Max. charge current [A]	35*	50 (3)
Max. discharge current [A]	35*	50 (3)
DoD [%]	80%	80%
Minimum number of working cycles @ 25°C, DoD 80%	4000	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	0 % ÷ 95 %	
Maximum altitude [m]	< 4000	
Cooling	Natural convection	
Noise [dB]	< 25	
Weight [Kg]	24	39,7
Dimension (Width x Depth x Height) [mm]	483x435x89	442x420x161
Mountig	Rack 19”	
Protection degree	IP20	
Pollution degree	3	
Installation	Indoor	
Certifications		
Certifications	CE, TÜV/IEC62619	
Transport regulation	UN38.3	

(*) 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	1 x US5000	4 x US2000B	2x US5000
Dimension (Width x Depth x Height) [mm]	500x200x485		513x405x522	
Weight without batteries [Kg]	11		14	

Control Technical Data

Model	ATM-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]	22,5
Protection degree	IP20
Pollution degree	3
Installation	Indoor
Certification	
Certification	CE