DATASHEET

batterX home Inverter

Model	Unit	i10	i20	i30
PPV side				
Nominal input power	kW	10	20	30
Max. input power	kW	15	30	45
Starting voltage MPPT	V	165		230
Max. DC input voltage	V	1000		
Rated DC input voltage	V	620		
MPPT voltage range	V	135-850		200-850
Quantity of MPPTs / Quantity of inputs per MPPT	pcs	2 / 2	2 / 2	4 / 2
Max. input current	A	30 + 30	30 + 30	30 + 30 + 30 +30
Max. short-circuit current	A	40 + 40	40 + 40	40 + 40 + 40 + 40
Compatible power optimisers[1]		Tigo		
Battery side				
Battery system		batterX home S1 BAT		
Max. charging current	A	40	40	100
Max. discharging current	A	40	40	100
Short circuit current rating for the battery input	A	100	100	120
Grid side				
Rated output power	kW	10	20	30
Max. output power	kW	11	22	33
Rated output apparent power	kVA	10	20	30
Max. output apparent power	kVA	11	22	33
Max. input apparent power	kVA	20	30	36
Max. charging power of battery	kW	10	20	30
Rated AC voltage	V	3x400V + N + PE		
Rated AC frequency	Hz	50/60		
Rated output current	A	14.5	29	43,5
Max. output current	A	16.5	33.5	50
Max. input current	A	29	43.5	52.2
Measured inrush current	A	5.6 @17µs	14.4 @70µs	16.5 @25µs
Max. ouput fault current	A	59.4	68.4	114
Max. output overcurrent protection	A	59.4	68.4	114
Power factor		0.8 leading - 0.8 lagging		
Max. total harmonic distortion		<3% @Rated output power		
Back-up side				
Rated output power	kW	10	20	30
Max. output power	kW	11	22	33
Rated output apparent power	kVA	10	20	30
Max. output apparent power	kVA	11	22	33
Rated output current	A	14.5	29	43.5
Max. output current	A	16.5	33.5	50
UPS switching time	ms	<10	<10	<20
Rated output voltage	V	3x400V + N +PE		
Rated output frequency	Hz	50/60		
Peak output apparent power	kVA	15 @60s	30 @60s	36 @60s
Voltage harmonic distortion		<3% @linear load		
Generator-Seite[2]				
Max. input apparent power	kVA	-		30
Max. charging power of battery	kW	-		30
Rated AC voltage	V	-		3x400 + N + PE
Rated AC frequency	Hz	-		50/60
Max. input current	A	-		45.5

[1] Model selection and technical details on request

[2] For connecting an external generator (e.g., a diesel generator) in emergency or backup power mode. The generator must be sized to accommodate the maximum connected load; undersizing may result in voltage and frequency fluctuations, as well as damage to the generator, inverter, connected loads, and other electrical equipment.
Follow the installation manual for connection and sizing.

DATASHEET

batterX home Inverter

Model	Unit	i10	i20	i30
Efficiency				
Max. efficiency/ European efficiency	%	98.4 / 97.5	98.4 / 97.5	98.8 / 98.3
Protection				
DC reverse polarity protection		Integrated		
Battery input reverse connection protection		Integrated		
Insulation resistance protection		Integrated		
Surge protection		Integrated		
Over-temperature protection		Integrated		
Residual current protection		Integrated		
Islanding protection		Integrated		
AC over-voltage protection		Integrated		
Overload protection		Integrated		
AC short-circuit protection		Integrated		
General data				
Overvoltage category		PV: II; Main: III		
AC Input & Output terminals (flex. / rigid)	mm²	2.5-10|2.5-10	2.5-10|2.5-10	10-25|10-35
Dimensions (W*H*D)	mm	534*418*210	534*418*210	800*620*300
Min. distance to the device (Top / Bottom / Side)	mm	500 / 500 / 300		300 / 300 / 600
Weight	kg	28	31	72
IP rating		IP65		
Standby self-consumption	W	<15		
Topology		Transformerless		
Operating temperature range	°C	-30~60		
Relative Humidity	%	0~100		
Operating Altitude	m	3000		
Cooling		Smart fan		
Noise level	dB	<40	<40	<50
Warranty[3]		10 years		
Black start capable		Yes		
Display		LED		
Certification/Standards		CE EMC / CE LVD (NSR) / EN 50549-1 / VDE-AR-N-4105 / VDE V 0124-100 / OVE-Guideline R25 & TOR Producer / Further information available on request		
Installation method		Wall mounting		

[3] Further information in our warranty conditions

DATASHEET

batterX home S1 BAT

Modell	Unit	S1 BAT 2.5
Usable energy	kWh	2.56
Nominal capacity	Ah	50
Nominal voltage	V	51.2
Voltage range	V	44.8 ~ 57.6
Max. charging / discharging current	A	50 / 50
Max. charging/ discharging rate		C1
Weight	kg	32
Dimension (W*H*D)	mm	650*168*350 (incl. connection contacts)
Cell type		$LiFePO_4$(LFP "Lithium-iron-phosphat")
Installation method		Stackable
Number of battery modules		3-10 in series connection per tower
Modell	**Unit**	**S1 BMS**
Dimension (W*H*D)	mm	650*350*140 (incl. connection contacts)
Weight	kg	17
Installation method		Stackable
Modell	**Unit**	**S1 BASE**
Dimension (W*H*D)	mm	650*350*118 (incl. connection contacts)
Weight	kg	12
Installation method		Stackable
Modell	**Unit**	**S1 MULTI**
Dimension (W*H*D)	mm	400*136*343
Weight	kg	6
Installation method		Wall mounting
Power supply	V	Plug-in power supply 230VAC / 12VDC (included)
		General data
IP rating		IP54
Warranty[3]		10 years/ 6000 Cycles
Operation temparature	°C	0~55 (Charge) / -10~55 (Discharge)
Relative humidity	%	5%-95% (without condensation)
Max. altitude	m	2000
Battery connections		Stackable & parallel
Certification		CE/IEC62619/UN38.3

[3] Further information in our warranty conditions.

DATASHEET

batterX home EMX

Modell	Unit	EMX
Operating voltage	V	Plug-in power supply 230VAC / 12VDC (included)
Max. input current	Adc	2.5
Max. input power	W	30
IP rating		IP65
Warranty	years	10
Operation temperature	°C	-5 ~ 40
Relative humidity	%	5% - 95% (No condensation)
Max. altitude	m	2000
Dimension (W*H*D)	mm	300*250*180
Weight	kg	5.2
Installation method		Wall mounting / lockable
Hardware interfaces		Potential-free contacts (4x Input & 4x Output)
Software interfaces		Rest-API / Modbus-RTU / Ethernet / CAN / SG-Ready
Special features		batterX cloud / batterX dynamic grid tarif (country-dependent)
Certification		CE / EN 60730-1 / EN 62368-1 / §14a EnWG

DATASHEET

batterX home i10

Model	Unit	S1 BAT 7.5	S1 BAT 10	S1 BAT 12.5	S1 BAT 15	S1 BAT 17.5
Usable energy[4]	kWh	7.7	10.2	12.8	15.4	17.9
Max. charging power grid	kW	6	8	10	10	10
Max. charging power PV	kW	6	8	10	12	14
Max. charging power total	kW	6	8	10	12	14
Max. discharging grid/backup	kW	6	8	10	11	11
Quantity of battery towers	pcs	1	1	1	1	1
Battery weight	kg	125	157	189	221	253
Dimensions (Towers x W*D*H)	mm	1x650*350*621	1x650*350*755	1x650*350*889	1x650*350*1023	1x650*350*1157
Quantity S1 BAT 2.5	pcs	3	4	5	6	7
Quantity S1 BASE	pcs	1	1	1	1	1
Quantity S1 BMS	pcs	1	1	1	1	1
Quantity S1 MULTI	pcs	0	0	0	0	0

Model	Unit	S1 BAT 20	S1 BAT 22.5	S1 BAT 25	S1 BAT 30	S1 BAT 35
Usable energy[4]	kWh	20.5	23.0	25.6	30.7	35.8
Max. charging power grid	kW	10	10	10	10	10
Max. charging power PV	kW	15	15	15	12	14
Max. charging power total	kW	16	18	20	12	14
Max. discharging grid/backup	kW	11	11	11	11	11
Quantity of battery towers	pcs	1	1	1	2	2
Battery weight	kg	285	317	349	448	512
Dimensions (Towers x W*D*H)	mm	1x650*350*1291	1x650*350*1425	1x650*350*1559	2x650*350*1023	2x650*350*1157
Quantity S1 BAT 2.5	pcs	8	9	10	12	14
Quantity S1 BASE	pcs	1	1	1	2	2
Quantity S1 BMS	pcs	1	1	1	2	2
Quantity S1 MULTI	pcs	0	0	0	1	1

Model	Unit	S1 BAT 37.5	S1 BAT 40	S1 BAT 45	S1 BAT 50	S1 BAT 52.5
Usable energy[4]	kWh	38.4	41.0	46.1	51.2	53.8
Max. charging power grid	kW	10	10	10	10	10
Max. charging power PV	kW	10	15	15	15	14
Max. charging power total	kW	10	16	18	20	14
Max. discharging grid/backup	kW	11	11	11	11	11
Quantity of battery towers	pcs	3	2	2	2	3
Battery weight	kg	573	576	640	704	765
Dimensions (Towers x W*D*H)	mm	3x650*350*889	2x650*350*1291	2x650*350*1425	2 x650*350*1559	3x650*350*1157
Quantity S1 BAT 2.5	pcs	15	16	18	20	21
Quantity S1 BASE	pcs	3	2	2	2	3
Quantity S1 BMS	pcs	3	2	2	2	3
Quantity S1 MULTI	pcs	1	1	1	1	1

Model	Unit	S1 BAT 60	S1 BAT 67.5	S1 BAT 75
Usable energy[4]	kWh	61.4	69.1	76.8
Max. charging power grid	kW	10	10	10
Max. charging power PV	kW	15	15	15
Max. charging power total	kW	16	18	20
Max. discharging grid/backup	kW	11	11	11
Quantity of battery towers	pcs	3	3	3
Battery weight	kg	861	957	1053
Dimensions (Towers x W*D*H)	mm	3x650*350*1291	3x650*350*1425	3x650*350*1559
Quantity S1 BAT 2.5	pcs	24	27	30
Quantity S1 BASE	pcs	3	3	3
Quantity S1 BMS	pcs	3	3	3
Quantity S1 MULTI	pcs	1	1	1

[4] Usable DC capacity at 100% DOD, C0.2 charge and discharge rate, +25°C ambient temperature

DATASHEET

batterX home i20

Model	Unit	S1 BAT 7.5	S1 BAT 10	S1 BAT 12.5	S1 BAT 15	S1 BAT 17.5
Usable energy[4]	kWh	7.7	10.2	12.8	15.4	17.9
Max. charging power grid	kW	6	8	10	12	14
Max. charging power PV	kW	6	8	10	12	14
Max. charging power total	kW	6	8	10	12	14
Max. discharging grid/backup	kW	6	8	10	11	14
Quantity of battery towers	pcs	1	1	1	1	1
Battery weight	kg	125	157	189	221	253
Dimensions (Towers x W*D*H)	mm	1x650*350*621	1x650*350*755	1x650*350*889	1x650*350*1023	1x650*350*1157
Quantity S1 BAT 2.5	pcs	3	4	5	6	7
Quantity S1 BASE	pcs	1	1	1	1	1
Quantity S1 BMS	pcs	1	1	1	1	1
Quantity S1 MULTI	pcs	0	0	0	0	0

Model	Unit	S1 BAT 20	S1 BAT 22.5	S1 BAT 25	S1 BAT 30	S1 BAT 35
Usable energy[4]	kWh	20.5	23.0	25.6	30.7	35.8
Max. charging power grid	kW	16	18	20	12	14
Max. charging power PV	kW	16	18	20	12	14
Max. charging power total	kW	16	18	20	12	14
Max. discharging grid/backup	kW	16	18	20	22	22
Quantity of battery towers	pcs	1	1	1	2	2
Battery weight	kg	285	317	349	448	512
Dimensions (Towers x W*D*H)	mm	1x650*350*1291	1x650*350*1425	1x650*350*1559	2x650*350*1023	2x650*350*1157
Quantity S1 BAT 2.5	pcs	8	9	10	12	14
Quantity S1 BASE	pcs	1	1	1	2	2
Quantity S1 BMS	pcs	1	1	1	2	2
Quantity S1 MULTI	pcs	0	0	0	1	1

Model	Unit	S1 BAT 37.5	S1 BAT 40	S1 BAT 45	S1 BAT 50	S1 BAT 52.5
Usable energy[4]	kWh	38.4	41.0	46.1	51.2	53.8
Max. charging power grid	kW	10	16	18	20	14
Max. charging power PV	kW	10	16	18	20	14
Max. charging power total	kW	10	16	18	20	14
Max. discharging grid/backup	kW	22	22	22	22	22
Quantity of battery towers	pcs	3	2	2	2	3
Battery weight	kg	573	576	640	704	765
Dimensions (Towers x W*D*H)	mm	3x650*350*889	2x650*350*1291	2x650*350*1425	2 x650*350*1559	3x650*350*1157
Quantity S1 BAT 2.5	pcs	15	16	18	20	21
Quantity S1 BASE	pcs	3	2	2	2	3
Quantity S1 BMS	pcs	3	2	2	2	3
Quantity S1 MULTI	pcs	1	1	1	1	1

Model	Unit	S1 BAT 60	S1 BAT 67.5	S1 BAT 75
Usable energy[4]	kWh	61.4	69.1	76.8
Max. charging power grid	kW	16	18	20
Max. charging power PV	kW	16	18	20
Max. charging power total	kW	16	18	20
Max. discharging grid/backup	kW	22	22	22
Quantity of battery towers	pcs	3	3	3
Battery weight	kg	861	957	1053
Dimensions (Towers x W*D*H)	mm	3x650*350*1291	3x650*350*1425	3x650*350*1559
Quantity S1 BAT 2.5	pcs	24	27	30
Quantity S1 BASE	pcs	3	3	3
Quantity S1 BMS	pcs	3	3	3
Quantity S1 MULTI	pcs	1	1	1

[4] Usable DC capacity at 100% DOD, C0.2 charge and discharge rate, +25°C ambient temperature

DATASHEET

batterX home i30

Model	Unit	S1 BAT 7.5	S1 BAT 10	S1 BAT 12.5	S1 BAT 15	S1 BAT 17.5
Usable energy[4]	kWh	7.7	10.2	12.8	15.4	17.9
Max. charging power grid	kW	8	10	13	15	18
Max. charging power PV	kW	8	10	13	15	18
Max. charging power total	kW	8	10	13	15	18
Max. discharging grid/backup	kW	8	10	13	15	18
Quantity of battery towers	pcs	1	1	1	1	1
Battery weight	kg	125	157	189	221	253
Dimensions (Towers x W*D*H)	mm	1x650*350*621	1x650*350*755	1x650*350*889	1x650*350*1023	1x650*350*1157
Quantity S1 BAT 2.5	pcs	3	4	5	6	7
Quantity S1 BASE	pcs	1	1	1	1	1
Quantity S1 BMS	pcs	1	1	1	1	1
Quantity S1 MULTI	pcs	0	0	0	0	0

Model	Unit	S1 BAT 20	S1 BAT 22.5	S1 BAT 25	S1 BAT 30	S1 BAT 35
Usable energy[4]	kWh	20.5	23.0	25.6	30.7	35.8
Max. charging power grid	kW	20	23	26	30	30
Max. charging power PV	kW	20	23	26	31	36
Max. charging power total	kW	20	23	26	31	36
Max. discharging grid/backup	kW	20	23	26	31	33
Quantity of battery towers	pcs	1	1	1	2	2
Battery weight	kg	285	317	349	448	512
Dimensions (Towers x W*D*H)	mm	1x650*350*1291	1x650*350*1425	1x650*350*1559	2x650*350*1023	2x650*350*1157
Quantity S1 BAT 2.5	pcs	8	9	10	12	14
Quantity S1 BASE	pcs	1	1	1	2	2
Quantity S1 BMS	pcs	1	1	1	2	2
Quantity S1 MULTI	pcs	0	0	0	1	1

Model	Unit	S1 BAT 37.5	S1 BAT 40	S1 BAT 45	S1 BAT 50	S1 BAT 52.5
Usable energy[4]	kWh	38.4	41.0	46.1	51.2	53.8
Max. charging power grid	kW	26	30	30	30	30
Max. charging power PV	kW	26	41	45	45	36
Max. charging power total	kW	26	41	46	51	36
Max. discharging grid/backup	kW	26	33	33	33	33
Quantity of battery towers	pcs	3	2	2	2	3
Battery weight	kg	573	576	640	704	765
Dimensions (Towers x W*D*H)	mm	3x650*350*889	2x650*350*1291	2x650*350*1425	2 x650*350*1559	3x650*350*1157
Quantity S1 BAT 2.5	pcs	15	16	18	20	21
Quantity S1 BASE	pcs	3	2	2	2	3
Quantity S1 BMS	pcs	3	2	2	2	3
Quantity S1 MULTI	pcs	1	1	1	1	1

Model	Unit	S1 BAT 60	S1 BAT 67.5	S1 BAT 75
Usable energy[4]	kWh	61.4	69.1	76.8
Max. charging power grid	kW	30	30	30
Max. charging power PV	kW	41	45	45
Max. charging power total	kW	41	46	51
Max. discharging grid/backup	kW	33	33	33
Quantity of battery towers	pcs	3	3	3
Battery weight	kg	861	957	1053
Dimensions (Towers x W*D*H)	mm	3x650*350*1291	3x650*350*1425	3x650*350*1559
Quantity S1 BAT 2.5	pcs	24	27	30
Quantity S1 BASE	pcs	3	3	3
Quantity S1 BMS	pcs	3	3	3
Quantity S1 MULTI	pcs	1	1	1

[4] Usable DC capacity at 100% DOD, C0.2 charge and discharge rate, +25°C ambient temperature

www.batterx.de