

Sodium-ion cells

Cell Model	Unit	33140C-100-30	40160C-175-30	40160C-200-31	50160118C-0700-31E	50160118C-0700-30H	40130208C-0800-30E	50160118C-0800-30E	50160153C-1030-30E	71173208C-1600-30
Shape		Cylindrical	Cylindrical	Cylindrical	Prismatic	Prismatic	Prismatic	Prismatic	Prismatic	Prismatic
Nominal capacity*	Ah	10	17.5	20	70	70	80	80	103	160
Nominal voltage*	V	3.00	3.00	3.10	3.00	3.00	3.00	3.00	3.00	3.00
Nominal energy*	Wh	30	52.5	62	210	210	240	240	309	480
Max. C-rate charging‡		1	2	1	1	2	1	1	1	1
Max. C-rate discharging‡		5	4	2	1	4	1	1	1	2
Internal impedance @ 1kHz	mΩ	≤ 4	≤ 1.6	≤ 1.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.65
Gravimetric energy density*	Wh/kg	113	119	141	117	117	133	133	155	114
Cycle life#	cycles	> 2000 to 80%	> 3000 to 80%	> 1500 to 80%	> 3000 to 80%	> 1000 to 80%	> 3000 to 80%	> 3000 to 80%	> 3000 to 80%	> 6000 to 80%
Dimension	mm	33.3ø x 140.5H	40.5ø x 160.5H	40.5ø x 160.5H	50.1 x 160 x 118.5	50.1 x 160 x 118.5	40 x 130.2 x 208	50.1 x 160 x 118.5	50.1 x 160 x 153.5	71.5 x 173.5 x 208
Operation temperature†	°C	-40 to +60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60	-40 to 60
Charging operating temperature†	-10~0°C	≤0.1C (**)		-10~0°C ≤0.1C	-10~0°C ≤0.1C (**)	-10~0°C ≤0.1C (**)	-10~0°C ≤0.1C (**)	-10~0°C ≤0.1C (**)	-10~0°C ≤0.1C (**)	-10~0°C ≤0.1C (**)
	0~10°C	≤0.2C	0~10°C ≤0.2C	0~10°C ≤0.2C	0~10°C ≤0.2C	0~15°C ≤0.2C	0~15°C ≤0.2C	0~15°C ≤0.2C	0~15°C ≤0.2C	0~10°C ≤0.2C
	10~20°C	≤0.5C	10~20°C ≤0.5C	10~20°C ≤0.5C	10~20°C ≤0.5C	15~20°C ≤0.5C	15~20°C ≤0.5C	15~20°C ≤0.5C	15~20°C ≤0.5C	10~20°C ≤0.5C
	20~25°C	≤1C	20~35°C ≤2C	20~35°C ≤1C	20~30°C ≤1C	20~30°C ≤2C	20~30°C ≤1C	20~30°C ≤1C	20~30°C ≤1C	20~30°C ≤1C
	25~35°C	≤1C	35~50°C ≤1C	35~50°C ≤0.5C	30~45°C ≤1C	30~45°C ≤1C	30~45°C ≤1C	30~45°C ≤1C	30~45°C ≤1C	30~45°C ≤1C
	35~45°C	≤0.5C	50~60°C ≤1C	50~60°C ≤0.2C	45~55°C ≤0.5C	45~55°C ≤0.5C	45~55°C ≤0.5C	45~55°C ≤0.5C	45~55°C ≤0.5C	45~55°C ≤0.5C
Discharging operating temperature†	-40~0°C	≤1C	-40~0°C ≤0.5C	-40~0°C ≤0.5C	-40~0°C ≤0.5C	-40~0°C ≤0.5C	-40~0°C ≤0.5C	-40~0°C ≤0.5C	-40~0°C ≤0.5C	-40~0°C ≤0.5C
	0~20°C	≤2C	0~20°C ≤2C	0~20°C ≤2C	0~20°C ≤0.5C	0~20°C ≤1C	0~20°C ≤0.5C	0~20°C ≤0.5C	0~20°C ≤0.5C	0~15°C ≤1C
	20~45°C	≤5C	20~45°C ≤4C	20~45°C ≤4C	20~45°C ≤1C	20~45°C ≤4C	20~45°C ≤1C	20~45°C ≤1C	20~45°C ≤1C	15~45°C ≤2C
	45~60°C	≤1C	45~60°C ≤1C	45~60°C ≤1C	45~60°C ≤0.5C	45~60°C ≤1C	45~60°C ≤0.5C	45~60°C ≤0.5C	45~60°C ≤0.5C	45~60°C ≤1C
Mass	g	265	440	440	1800	1800	1800	1800	2000	4200