

Koyosonic

Solar-Power Battery

NPS200-12 [12V200AH]

Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	200AH	
Dimensions	Length	522±2mm (20.55 inches)
	Width	240±2mm (9.45 inches)
	Container Height	218±2mm (8.58 inches)
	Total Height (with Terminal)	224±2mm (8.81 inches)
Approx Weight	Approx 60.0 kg (132.4lbs)	
Terminal	T5 (M8X16) / Torque: 9.6 ~ 10.7Nm	
Container Material	ABS	
Rated Capacity	208.0 AH/10.4A	(20hr, 1.80V/cell, 25°C/77°F)
	200.0 AH/20.0A	(10hr, 1.80V/cell, 25°C/77°F)
	172.0 AH/34.4A	(5hr, 1.75V/cell, 25°C/77°F)
	156.0 AH/52.0A	(3hr, 1.75V/cell, 25°C/77°F)
	122.0 AH/122.0A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	2000A (5s)	
Internal Resistance	Approx 2.7mΩ	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	0~40°C (32~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 60.0A. Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	NPS series of batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



Applications

- ◆ Solar or Wind Power System
- ◆ Stored energy (Photovoltaic)
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply



ISO9001 ISO14001

Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	278.4	240.0	204.6	154.8	115.1	94.3	60.1	46.2	37.6	31.3	27.2	22.1	18.9	10.3
1.80V/cell	343.9	282.4	235.8	179.5	133.9	105.6	65.5	50.6	40.6	33.6	29.2	23.4	20.0	10.4
1.75V/cell	377.8	302.0	250.2	189.2	139.0	110.5	68.0	52.0	41.7	34.5	30.0	23.8	20.2	10.5
1.70V/cell	411.8	322.5	264.0	196.4	144.5	114.0	70.7	53.5	42.7	35.3	30.6	24.2	20.4	10.7
1.65V/cell	444.4	342.9	281.4	204.6	148.1	117.8	72.7	55.8	44.2	36.3	31.3	24.7	20.8	10.8
1.60V/cell	476.4	366.7	297.6	216.0	154.4	122.0	75.1	57.5	45.5	37.3	32.0	25.1	21.0	10.9

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	514.3	447.8	385.7	295.0	221.3	181.9	116.6	90.1	73.4	61.3	53.5	43.6	37.4	20.4
1.80V/cell	627.7	519.9	438.0	336.9	255.4	202.6	126.4	98.1	78.9	65.5	57.2	46.1	39.5	20.6
1.75V/cell	678.7	549.2	460.2	352.2	262.5	211.0	130.6	100.5	80.7	67.2	58.6	46.8	39.9	20.7
1.70V/cell	723.0	578.2	482.0	363.5	272.0	217.0	135.6	103.1	82.6	68.6	59.7	47.4	40.2	21.1
1.65V/cell	773.1	610.1	509.9	375.7	276.3	222.7	138.5	107.0	85.1	70.2	60.8	48.4	41.0	21.4
1.60V/cell	809.8	641.7	533.4	393.8	286.4	229.4	142.5	109.8	87.3	72.0	61.9	49.0	41.4	21.5

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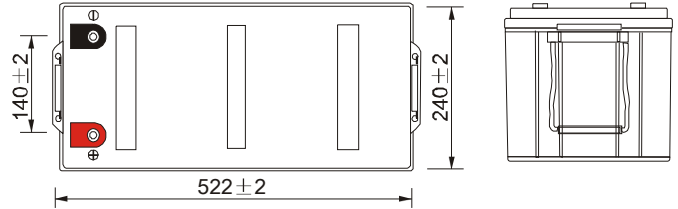
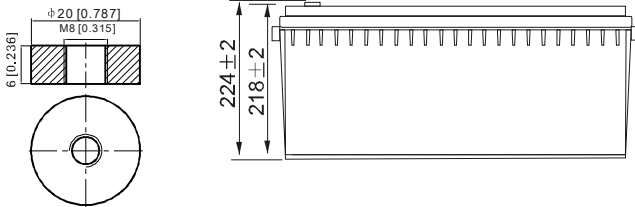
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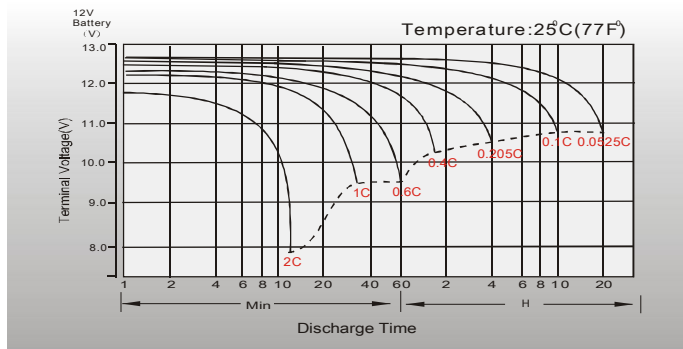
Dimensions

T5 Terminal

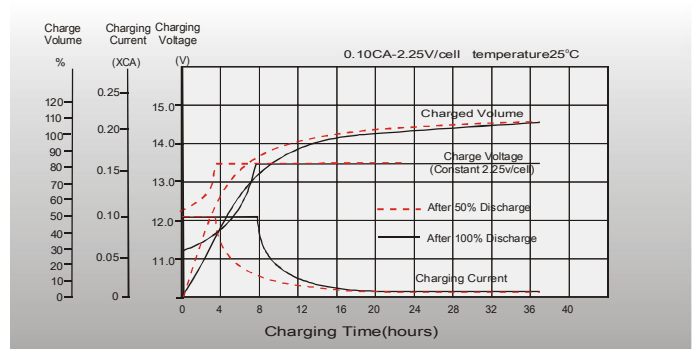
Unit: mm [inches]



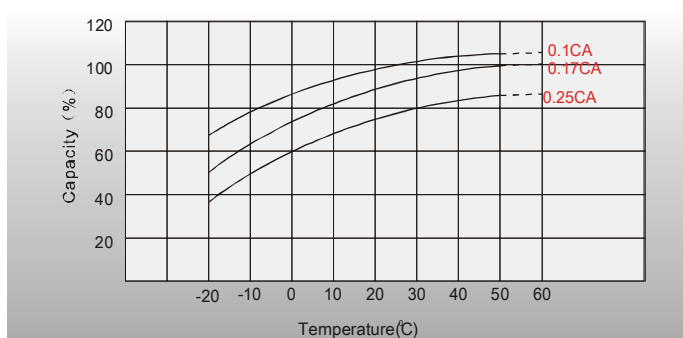
Discharge Characteristics



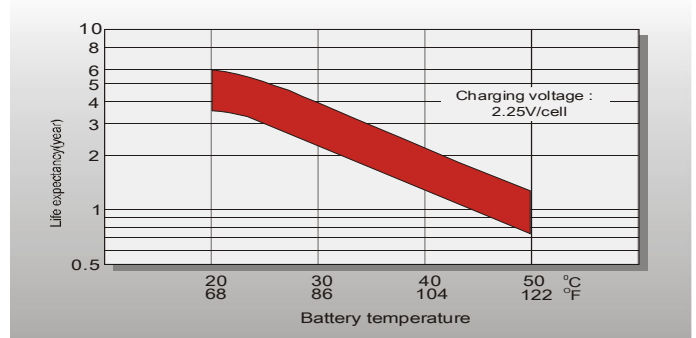
Float Charging Characteristics



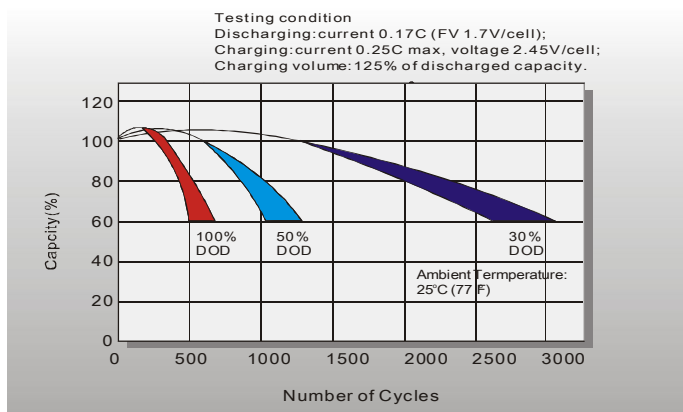
Temperature Effects in Relation to Battery Capacity



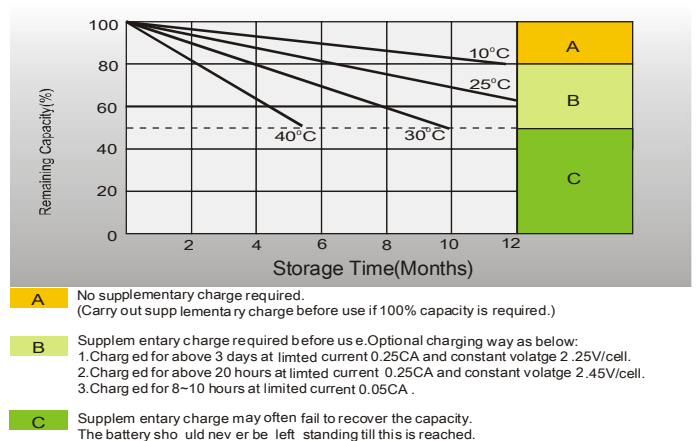
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Specifications subject to change without prior notice.