

DATASHEET

CB2-100LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.



CRYSTAL TECHNOLOGY

Our unique electrolyte crystalizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

TECHNICAL SPECIFICATIONS

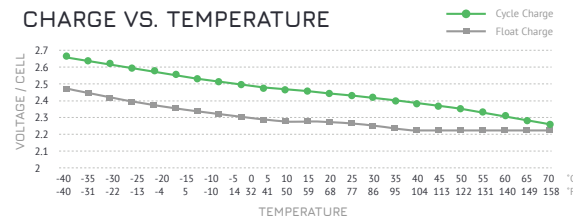
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	100Ah
WEIGHT	~ 5.8 kg / 12.8 lbs
DIMENSIONS	Height: 210 mm (8.3") Length: 172 mm (6.8") Width: 72 mm (2.8")
CAPACITY 25 °C (77 °F)	120 hour rate (1.0A) - 120Ah 20 hour rate (5.4A) - 108Ah 10 hour rate (10A) - 100Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25°C (77 °F)	< 0.6mΩ
SELF DISCHARGE 25°C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	1000A (5s)
TERMINAL	M6 (16)
(CHARGING) CYCLE	Initial Charging Current 30A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



DATASHEET - CB2-100LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART

Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122	131	140	149	158
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23	2.23	2.23	2.23	2.23

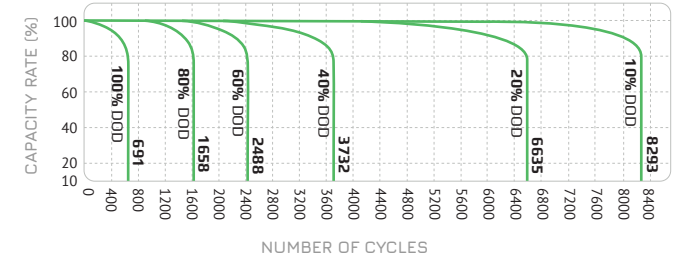
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	270.24	172.40	113.60	85.50	69.90	41.70	30.30	23.55	20.00	17.20	13.00	10.50	8.85	5.53	4.63
1.67V	232.60	156.30	105.30	81.00	67.70	39.80	28.80	23.30	19.00	17.00	12.80	10.30	8.85	5.53	4.63
1.70V	222.20	151.50	102.00	80.00	65.40	39.20	28.20	23.10	18.90	16.90	12.70	10.20	8.85	5.52	4.62
1.75V	202.00	141.80	98.00	76.90	63.30	37.70	27.40	22.50	18.30	16.50	12.50	10.10	8.77	5.52	4.61
1.80V	178.60	129.90	94.30	74.10	60.60	36.40	27.00	22.10	17.90	16.10	12.20	10.00	8.58	5.50	4.59
1.83V	155.90	118.70	87.10	68.87	57.30	34.80	26.00	21.20	17.10	15.50	11.80	9.70	8.35	5.48	4.46
1.85V	133.30	107.50	80.00	63.70	54.10	33.30	25.00	20.40	16.40	15.00	11.40	9.43	8.11	5.47	4.33

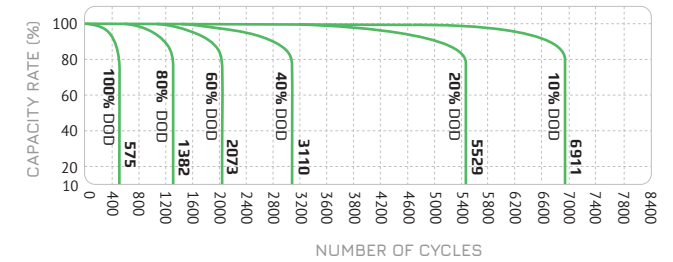
DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	448.10	301.70	206.50	206.50	130.40	79.60	58.00	45.10	38.40	33.70	25.50	20.78	17.40	10.80	9.06
1.67V	400.30	281.30	193.30	193.30	127.00	77.12	56.60	44.90	37.20	33.30	25.00	20.30	17.40	10.80	9.06
1.70V	387.39	274.00	188.00	188.00	123.40	75.10	54.30	44.60	36.50	33.10	24.91	20.10	17.40	10.80	9.05
1.75V	357.60	257.60	181.80	181.80	120.00	72.60	53.00	43.90	35.60	32.60	24.40	19.90	17.40	10.80	9.04
1.80V	324.20	237.40	175.60	175.60	115.50	70.20	52.40	43.10	34.70	32.10	24.00	19.70	16.90	10.70	9.02
1.83V	286.30	219.80	164.00	164.00	109.70	67.60	50.60	41.70	33.50	31.20	23.20	19.20	16.50	10.70	8.79
1.85V	248.40	202.19	152.40	152.40	104.00	65.00	48.80	40.20	32.20	30.30	22.40	18.70	16.10	10.60	8.57

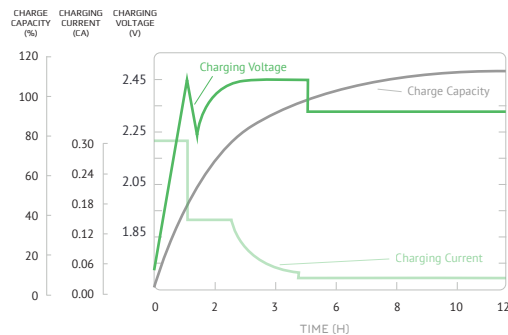
CYCLE LIFE CURVE GRAPH 25°C (77°F).



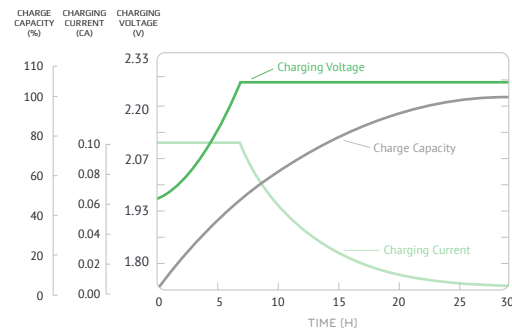
CYCLE LIFE CURVE GRAPH 40°C (104°F).



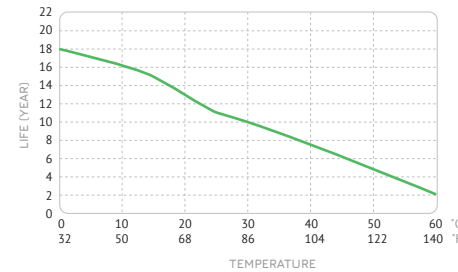
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



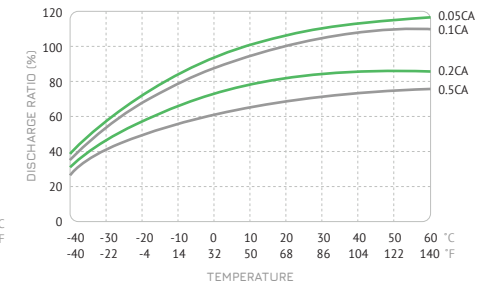
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.





CRYSTAL TECHNOLOGY

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BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



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EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

CB2-200LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

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TECHNICAL SPECIFICATIONS

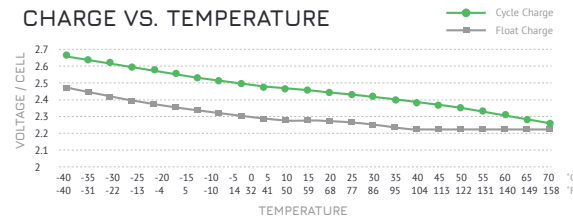
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	200Ah
WEIGHT	~ 13.5 kg / 29.8 lbs
DIMENSIONS	Height: 343 mm (13.5") Length: 174 mm (6.9") Width: 112 mm (4.4")
CAPACITY 25 °C (77 °F)	120 hour rate (2A) - 240Ah 20 hour rate (21A) - 420Ah 10 hour rate (20A) - 200Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25°C (77 °F)	< 0.5mΩ
SELF DISCHARGE 25°C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	2000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 60A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



DATASHEET - CB2-200LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART

Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122	131	140	149	158
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23	2.23	2.23	2.23	2.23

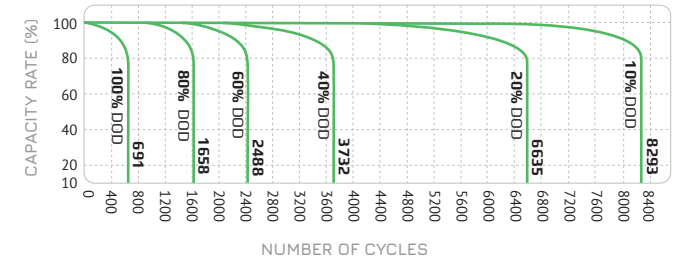
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	540.48	344.80	227.20	171.00	139.80	83.40	60.60	47.10	40.00	34.40	26.00	21.00	17.70	11.06	9.27
1.67V	465.19	312.60	210.60	162.00	135.40	79.60	57.60	46.60	38.00	34.00	25.60	20.60	17.70	11.06	9.27
1.70V	444.41	303.00	204.00	160.00	130.80	78.40	56.40	46.20	37.80	33.80	25.40	20.40	17.70	11.04	9.24
1.75V	403.99	283.60	196.00	153.80	126.60	75.40	54.80	45.00	36.60	33.00	25.00	20.20	17.54	11.04	9.22
1.80V	357.19	259.80	188.60	148.20	121.20	72.80	54.00	44.20	35.80	32.20	24.40	20.00	17.16	11.00	9.18
1.83V	311.81	237.40	174.20	137.73	114.60	69.60	52.00	42.40	34.20	31.00	23.60	19.40	16.70	10.96	8.92
1.85V	266.59	215.00	160.00	127.40	108.20	66.60	50.00	40.80	32.80	30.00	22.80	18.86	16.22	10.94	8.66

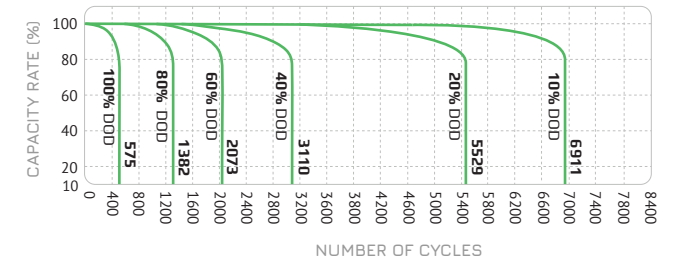
DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	896.19	603.40	413.00	314.80	260.80	159.20	116.00	90.20	76.80	67.40	51.00	41.57	34.80	21.60	18.12
1.67V	800.59	562.60	386.60	301.20	254.00	154.24	113.20	89.80	74.40	66.60	49.99	40.60	34.80	21.60	18.12
1.70V	774.78	547.99	376.00	298.00	246.80	150.20	108.60	89.20	73.00	66.20	49.83	40.20	34.80	21.60	18.10
1.75V	715.20	515.19	363.60	288.80	240.00	145.21	106.00	87.80	71.20	65.20	48.80	39.79	34.80	21.60	18.08
1.80V	648.40	474.80	351.20	279.60	231.00	140.40	104.80	86.20	69.40	64.20	48.00	39.40	33.80	21.40	18.04
1.83V	572.61	439.59	328.00	262.00	219.40	135.20	101.20	83.40	67.00	62.40	46.40	38.40	33.00	21.40	17.58
1.85V	496.80	404.39	304.80	244.40	208.00	130.00	97.60	80.40	64.40	60.60	44.80	37.40	32.20	21.20	17.14

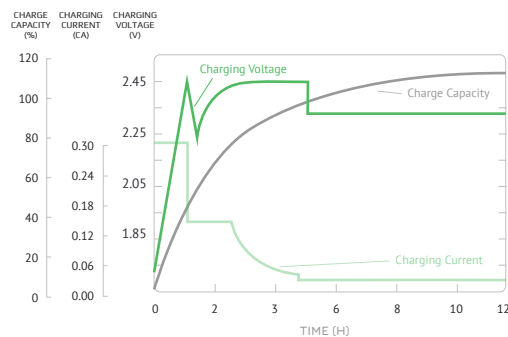
CYCLE LIFE CURVE GRAPH 25°C (77°F).



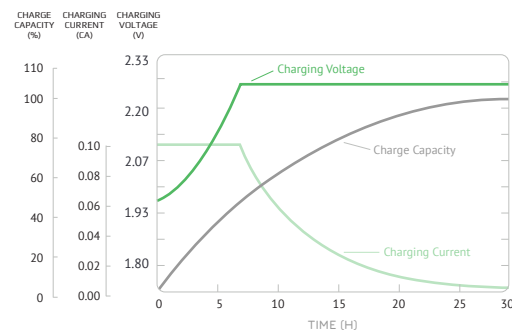
CYCLE LIFE CURVE GRAPH 40°C (104°F).



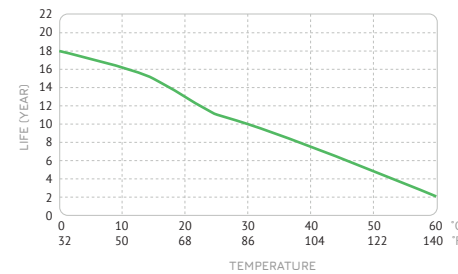
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



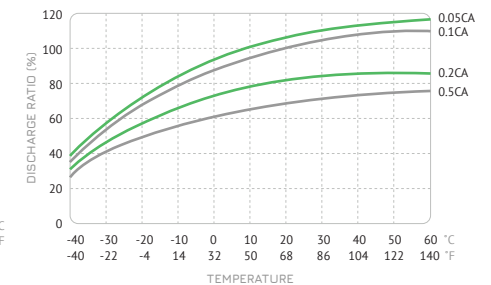
FLOATING CHARACTERISTICS 25°C (77°F).



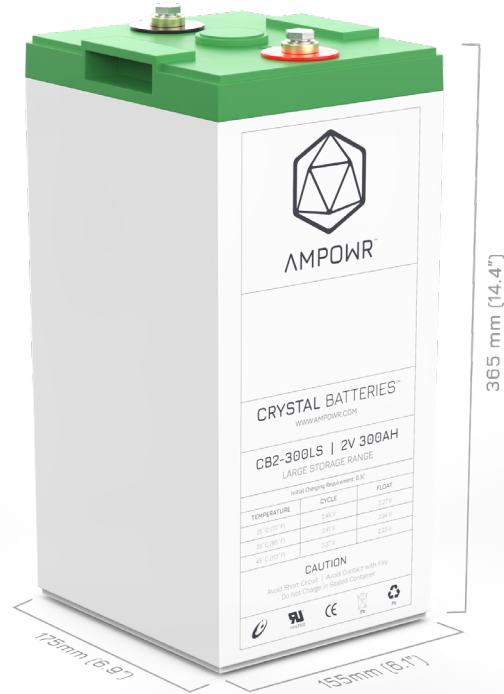
FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET



CRYSTAL TECHNOLOGY

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UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

CB2-300LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.

TECHNICAL SPECIFICATIONS

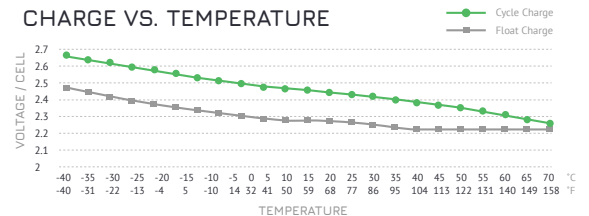
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	300Ah
WEIGHT	~ 26 kg / 57.3 lbs
DIMENSIONS	Height: 365 mm (14.4") Length: 175 mm (6.9") Width: 155 mm (6.1")
CAPACITY 25 °C (77 °F)	120 hour rate (3.0A) - 360Ah 20 hour rate (16.5A) - 330Ah 10 hour rate (30A) - 300Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25°C (77 °F)	< 0.45mΩ
SELF DISCHARGE 25°C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	3000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 90A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



DATASHEET - CB2-300LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART

Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122	131	140	149	158
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23	2.23	2.23	2.23	2.23

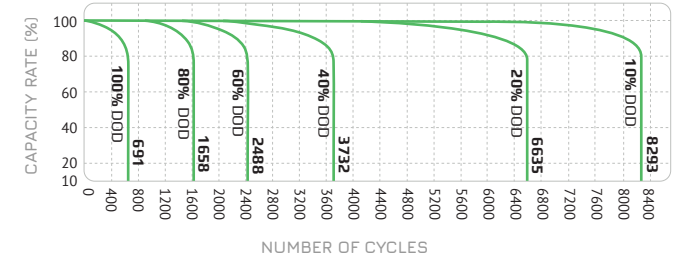
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	810.72	517.20	340.80	256.50	209.70	125.10	90.90	70.65	60.00	51.60	39.00	31.50	26.55	16.59	13.90
1.67V	697.79	468.90	315.90	243.00	203.10	119.40	86.40	69.90	57.00	51.00	38.40	30.90	26.55	16.59	13.90
1.70V	666.61	454.50	306.00	240.00	196.20	117.60	84.60	69.30	56.70	50.70	38.10	30.60	26.55	16.56	13.86
1.75V	605.99	425.40	294.00	230.70	189.90	113.10	82.20	67.50	54.90	49.50	37.50	30.30	26.31	16.56	13.83
1.80V	535.79	389.70	282.90	222.30	181.80	109.20	81.00	66.30	53.70	48.30	36.60	30.00	25.74	16.50	13.77
1.83V	467.71	356.10	261.30	206.60	171.90	104.40	78.00	63.60	51.30	46.50	35.40	29.10	25.05	16.44	13.38
1.85V	399.89	322.50	240.00	191.10	162.30	99.90	75.00	61.20	49.20	45.00	34.20	28.29	24.33	16.41	12.99

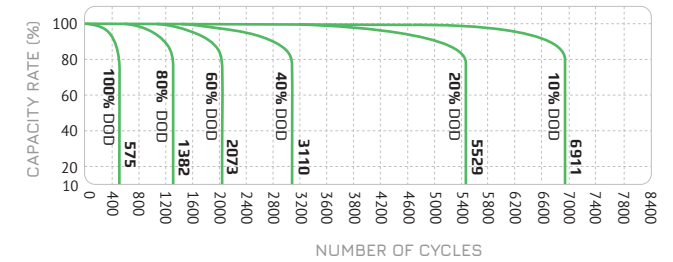
DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	1344.29	905.10	619.50	472.20	391.20	238.80	174.00	135.29	115.20	101.10	76.50	62.35	52.20	32.40	27.18
1.67V	1200.89	843.90	579.90	451.80	381.00	231.36	169.80	134.70	111.60	99.90	74.99	60.90	52.20	32.40	27.18
1.70V	1162.17	821.99	564.00	447.00	370.20	225.30	162.90	133.80	109.50	99.30	74.74	60.30	52.20	32.40	27.15
1.75V	1072.81	772.79	545.40	433.20	360.00	217.81	159.00	131.70	106.80	97.80	73.20	59.69	52.20	32.40	27.12
1.80V	972.60	712.20	526.79	419.40	346.50	210.60	157.20	129.31	104.10	96.30	72.00	59.10	50.70	32.10	27.06
1.83V	858.91	659.39	492.00	393.00	329.10	202.80	151.80	125.10	100.50	93.60	69.60	57.60	49.50	32.10	26.37
1.85V	745.20	606.58	457.20	366.60	312.00	195.00	146.40	120.60	96.60	90.90	67.20	56.10	48.30	31.80	25.71

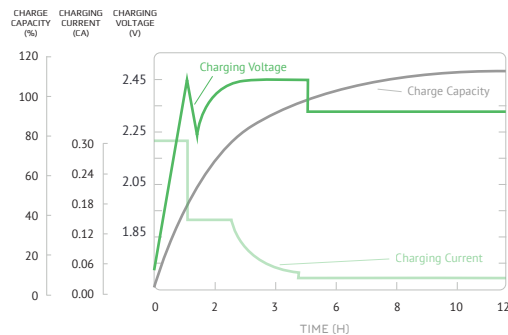
CYCLE LIFE CURVE GRAPH 25°C (77°F).



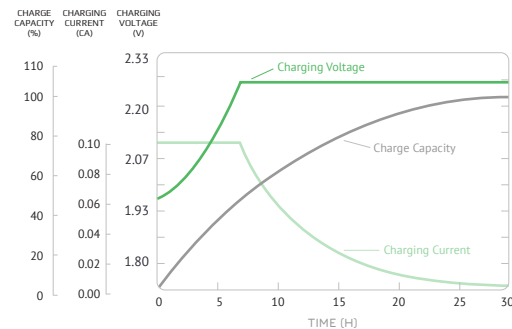
CYCLE LIFE CURVE GRAPH 40°C (104°F).



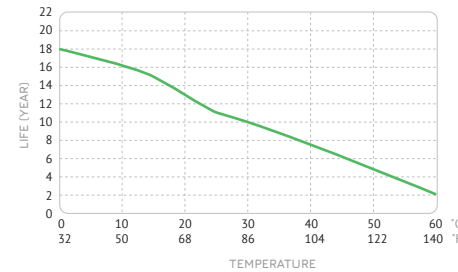
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



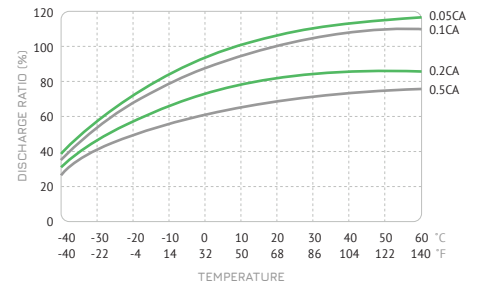
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET

CB2-400LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.



CRYSTAL TECHNOLOGY

Our unique electrolyte crystallizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

TECHNICAL SPECIFICATIONS

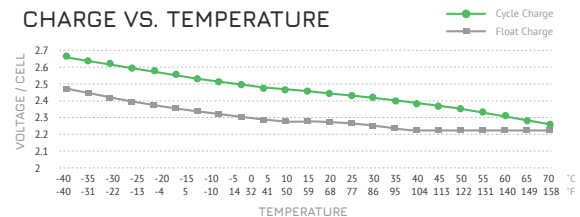
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	400Ah
WEIGHT	~ 26 kg / 57.3 lbs
DIMENSIONS	Height: 335 mm (13.2") Length: 210 mm (8.3") Width: 175 mm (6.9")
CAPACITY 25 °C (77 °F)	120 hour rate (4.0A) - 480Ah 20 hour rate (22A) - 440Ah 10 hour rate (40A) - 400Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25 °C (77 °F)	< 0.4mΩ
SELF DISCHARGE 25 °C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	4000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 120A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



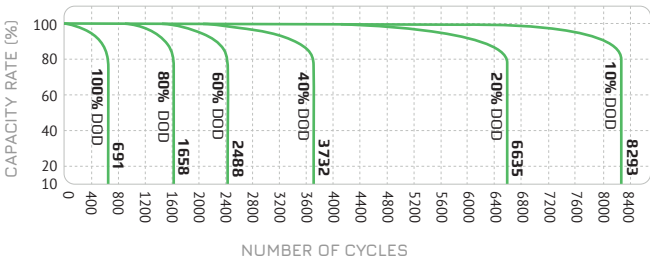
DATASHEET - CB2-400LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART																			
Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23

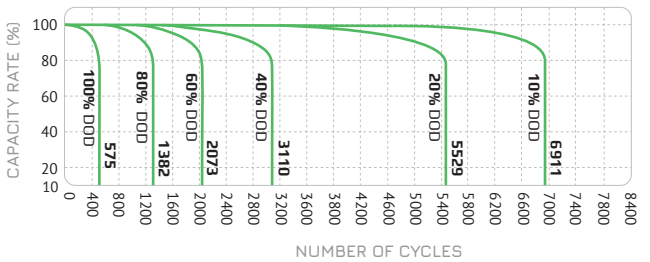
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	1080.96	689.60	454.40	342.00	279.60	166.80	121.20	94.20	80.00	68.80	52.00	42.00	35.40	22.12	18.53
1.67V	930.38	625.20	421.20	324.00	270.80	159.20	115.20	93.20	76.00	68.00	51.20	41.20	35.40	22.12	18.53
1.70V	888.82	606.00	408.00	320.00	261.60	156.80	112.80	92.40	75.60	67.60	50.80	40.80	35.40	22.08	18.48
1.75V	807.98	567.20	392.00	307.60	253.20	150.80	109.60	90.00	73.20	66.00	50.00	40.40	35.08	22.08	18.44
1.80V	714.38	519.60	377.20	296.40	242.40	145.60	108.00	88.40	71.60	64.40	48.80	40.00	34.32	22.00	18.36
1.83V	623.62	474.80	348.40	275.47	229.20	139.20	104.00	84.80	68.40	62.00	47.20	38.80	33.40	21.92	17.84
1.85V	533.18	430.00	320.00	254.80	216.40	133.20	100.00	81.60	65.60	60.00	45.60	37.72	32.44	21.88	17.32

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	1792.38	1206.81	826.00	629.60	521.60	318.40	232.00	180.39	153.60	134.80	102.00	83.13	69.60	43.20	36.24
1.67V	1601.18	1125.20	773.20	602.40	508.00	308.48	226.40	179.60	148.80	133.20	99.98	81.20	69.60	43.20	36.24
1.70V	1549.55	1095.98	752.00	596.00	493.60	300.40	217.20	178.40	146.00	132.40	99.65	80.40	69.60	43.20	36.20
1.75V	1430.41	1030.39	727.20	577.60	480.00	290.42	212.00	175.60	142.40	130.40	97.60	79.59	69.60	43.20	36.16
1.80V	1296.80	949.60	702.39	559.20	462.00	280.80	209.60	172.41	138.80	128.40	96.00	78.80	67.60	42.80	36.08
1.83V	1145.22	879.19	655.99	524.00	438.80	270.40	202.40	166.80	134.00	124.80	92.80	76.80	66.00	42.80	35.16
1.85V	993.60	808.77	609.60	488.80	416.00	260.00	195.20	160.80	128.80	121.20	89.60	74.80	64.40	42.40	34.28

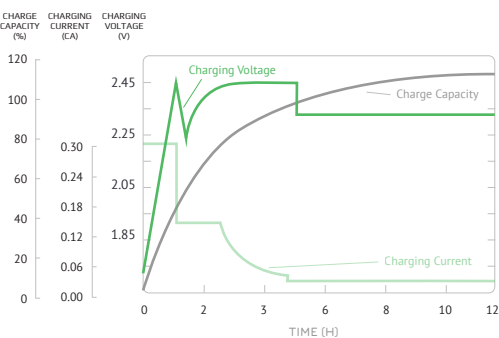
CYCLE LIFE CURVE GRAPH 25°C (77°F).



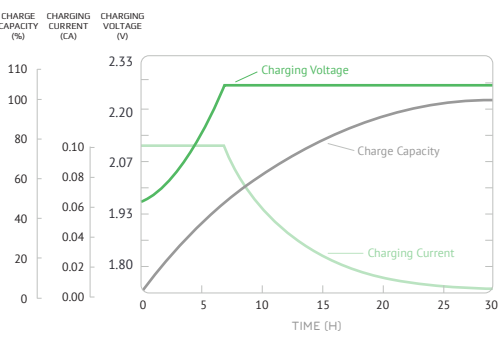
CYCLE LIFE CURVE GRAPH 40°C (104°F).



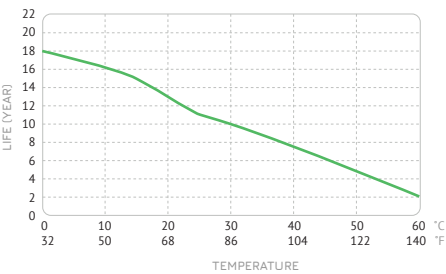
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



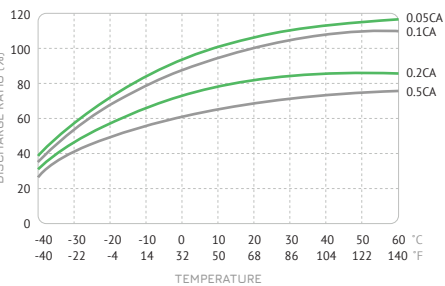
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET

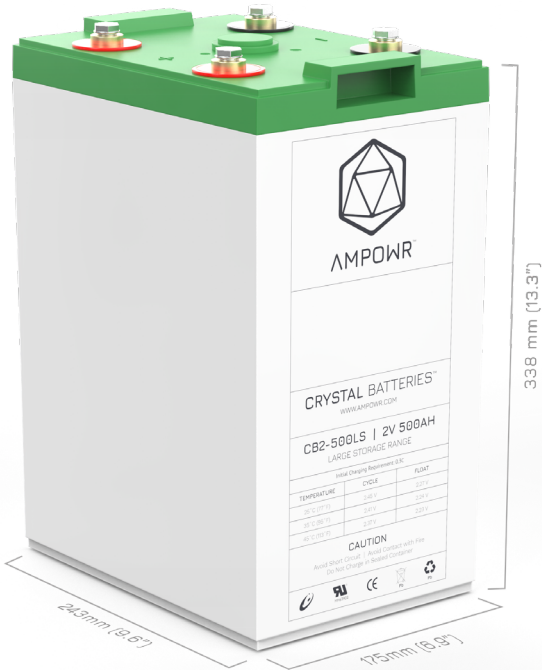
CB2-500LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.

TECHNICAL SPECIFICATIONS



CRYSTAL TECHNOLOGY

Our unique electrolyte crystallizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

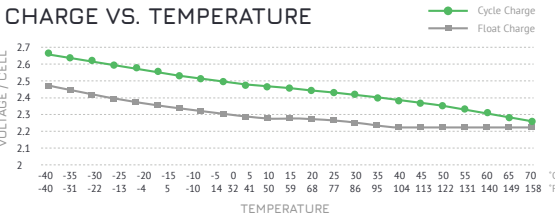
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	500Ah
WEIGHT	~ 31 kg / 68.3 lbs
DIMENSIONS	Height: 338 mm (13.3") Length: 243 mm (9.6") Width: 175 mm (6.9")
CAPACITY 25 °C (77 °F)	120 hour rate (5A) - 600Ah 20 hour rate (26A) - 520Ah 10 hour rate (50A) - 500Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25 °C (77 °F)	< 0.35mΩ
SELF DISCHARGE 25 °C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	5000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 150A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



DATASHEET - CB2-500LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART

Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122	131	140	149	158
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35	2.33	2.31	2.29	2.27
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23	2.23	2.23	2.23	2.23

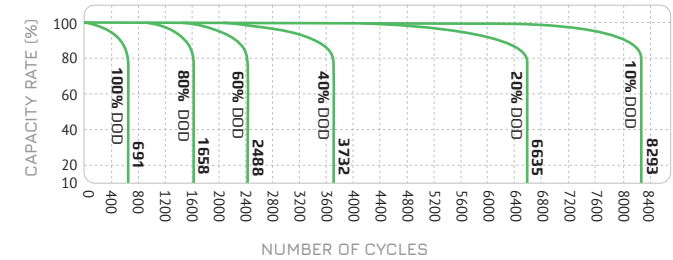
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	1351.20	862.00	568.00	427.50	349.50	208.50	151.50	117.75	100.00	86.00	65.00	52.50	44.25	27.65	23.17
1.67V	1162.98	781.50	526.50	405.00	338.50	199.00	144.00	116.50	95.00	85.00	64.00	51.50	44.25	27.65	23.17
1.70V	1111.02	757.50	510.00	400.00	327.00	196.00	141.00	115.50	94.50	84.50	63.50	51.00	44.25	27.60	23.10
1.75V	1009.98	709.00	490.00	384.50	316.50	188.50	137.00	112.50	91.50	82.50	62.50	50.50	43.85	27.60	23.05
1.80V	892.98	649.50	471.50	370.50	303.00	182.00	135.00	110.50	89.50	80.50	61.00	50.00	42.90	27.50	22.95
1.83V	779.52	593.50	435.50	344.33	286.50	174.00	130.00	106.00	85.50	77.50	59.00	48.50	41.75	27.40	22.30
1.85V	666.48	537.50	400.00	318.50	270.50	166.50	125.00	102.00	82.00	75.00	57.00	47.15	40.55	27.35	21.65

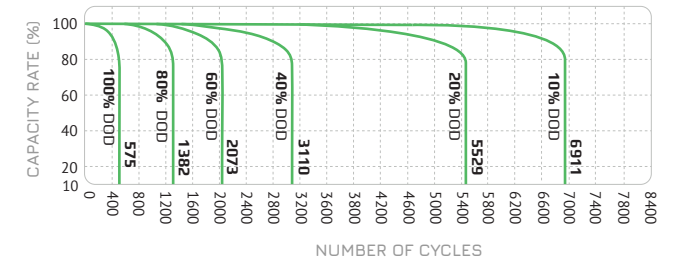
DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)

End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	2240.48	1508.51	1032.50	787.00	652.00	398.00	290.00	225.49	192.00	168.50	127.50	103.92	87.00	54.00	45.30
1.67V	2001.48	1406.50	966.50	753.00	635.00	385.60	283.00	224.50	186.00	166.50	124.98	101.50	87.00	54.00	45.30
1.70V	1936.94	1369.98	940.01	745.00	616.99	375.50	271.50	223.00	182.50	165.50	124.57	100.50	87.00	54.00	45.25
1.75V	1788.01	1287.99	909.00	722.01	600.00	363.02	265.00	219.50	178.00	163.00	122.00	99.49	87.00	54.00	45.20
1.80V	1620.99	1187.00	877.99	699.00	577.50	351.00	262.00	215.51	173.50	160.50	120.00	98.50	84.50	53.50	45.10
1.83V	1431.52	1098.98	819.99	655.00	548.50	338.00	253.00	208.50	167.50	156.00	116.00	96.00	82.50	53.50	43.95
1.85V	1242.00	1010.96	762.00	611.00	520.00	325.00	244.00	201.00	161.00	151.50	112.00	93.50	80.50	53.00	42.85

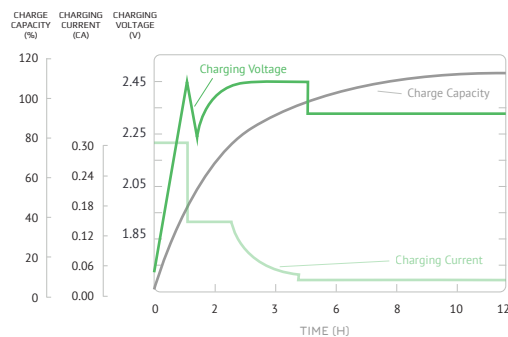
CYCLE LIFE CURVE GRAPH 25°C (77°F).



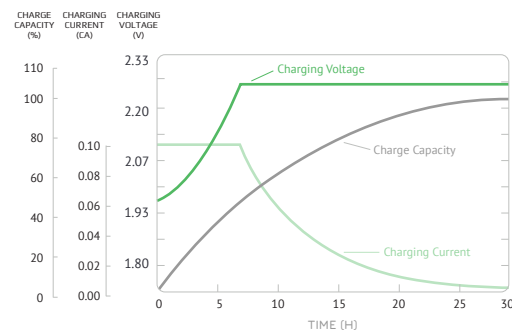
CYCLE LIFE CURVE GRAPH 40°C (104°F).



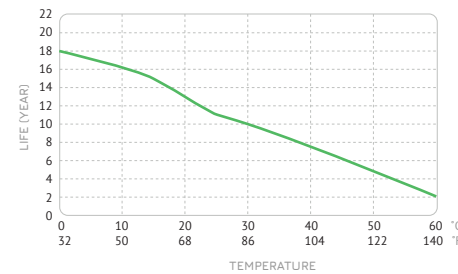
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



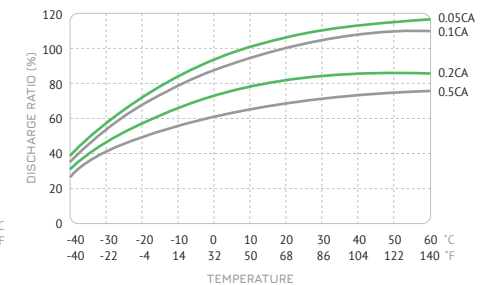
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.





CRYSTAL TECHNOLOGY

Our unique electrolyte crystallizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

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FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



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Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

CB2-600LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.

TECHNICAL SPECIFICATIONS

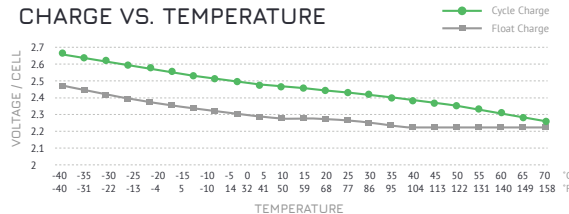
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	600Ah
WEIGHT	~ 37.5 kg / 82.7 lbs
DIMENSIONS	Height: 335 mm (13.2") Length: 301 mm (11.6") Width: 175 mm (6.9")
CAPACITY 25 °C (77 °F)	120 hour rate (6.0A) - 720Ah 20 hour rate (33A) - 660Ah 10 hour rate (60A) - 600Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25 °C (77 °F)	< 0.3mΩ
SELF DISCHARGE 25 °C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	6000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 180A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



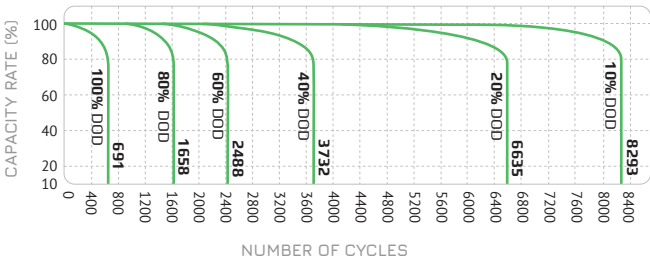
DATASHEET - CB2-600LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART																			
Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23

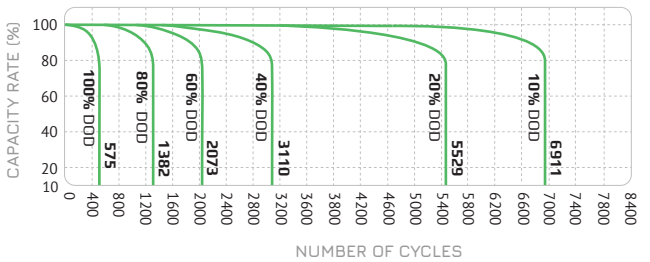
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	1621.44	1034.4	681.60	513.00	419.40	250.20	181.80	141.30	120.00	103.20	78.00	63.00	53.10	33.18	27.80
1.67V	1395.58	937.80	631.80	486.00	406.20	238.80	172.80	139.80	114.00	102.00	76.80	61.80	53.10	33.18	27.80
1.70V	1333.22	909.00	612.00	480.00	392.40	235.20	169.20	138.60	113.40	101.40	76.20	61.20	53.10	33.12	27.72
1.75V	1211.98	850.80	588.00	461.40	379.80	226.20	164.40	135.00	109.80	99.00	75.00	60.60	52.62	33.12	27.66
1.80V	1071.58	779.40	565.80	444.60	363.60	218.40	162.00	132.60	107.40	96.60	73.20	60.00	51.48	33.00	27.54
1.83V	935.42	712.20	522.60	413.20	343.80	208.80	156.00	127.20	102.60	93.00	70.80	58.20	50.10	32.88	26.76
1.85V	799.78	645.00	480.00	382.20	324.60	199.80	150.00	122.40	98.40	90.00	68.40	56.58	48.66	32.82	25.98

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	2688.58	1810.21	1239.00	944.40	782.40	477.60	348.00	270.59	230.40	202.20	153.00	124.70	104.40	64.80	54.36
1.67V	2401.78	1687.80	1159.80	903.60	762.00	462.72	339.60	269.40	223.20	199.80	149.97	121.80	104.40	64.80	54.36
1.70V	2324.33	1643.97	1128.01	894.00	740.39	450.60	325.80	267.60	219.00	198.60	149.48	120.60	104.40	64.80	54.30
1.75V	2145.61	1545.58	1090.80	866.41	720.00	435.63	318.00	263.40	213.60	195.60	146.40	119.38	104.40	64.80	54.24
1.80V	1945.19	1424.40	1053.59	838.79	692.99	421.20	314.40	258.61	208.20	192.60	144.00	118.20	101.40	64.20	54.12
1.83V	1717.82	1318.78	983.99	786.00	658.20	405.60	303.60	250.20	201.00	187.20	139.20	115.20	99.00	64.20	52.74
1.85V	1490.40	1213.16	914.40	733.20	624.00	389.99	292.80	241.20	193.20	181.80	134.40	112.20	96.60	63.60	51.42

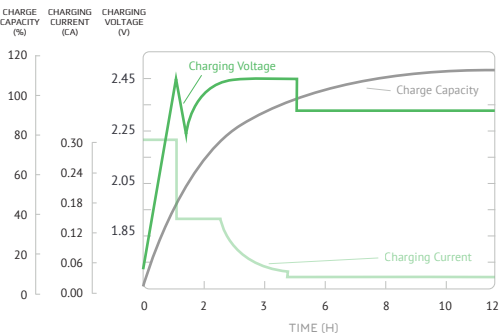
CYCLE LIFE CURVE GRAPH 25°C (77°F).



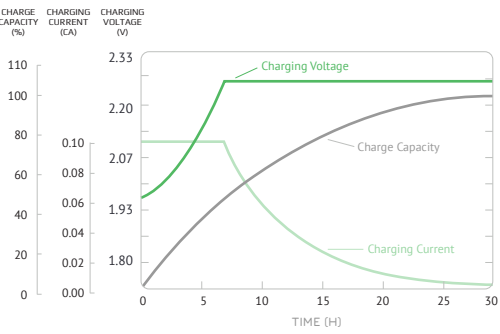
CYCLE LIFE CURVE GRAPH 40°C (104°F).



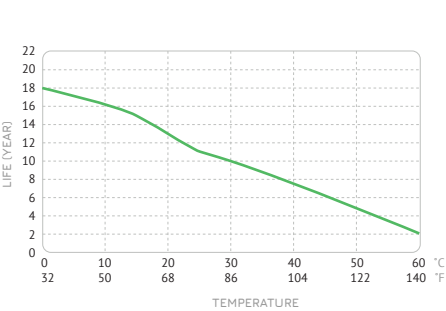
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



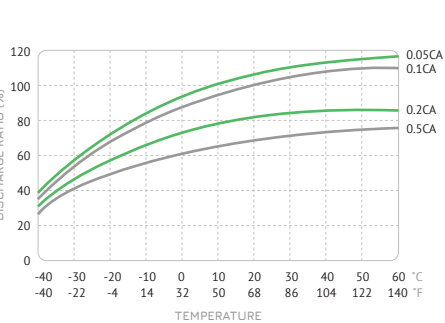
FLOATING CHARACTERISTICS 25°C (77°F).



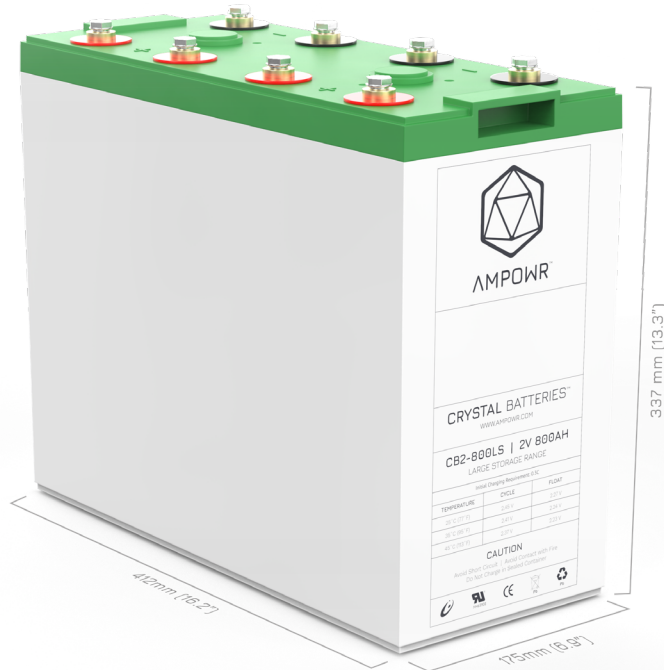
FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET



CRYSTAL TECHNOLOGY

Our unique electrolyte crystallizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

CB2-800LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.

TECHNICAL SPECIFICATIONS

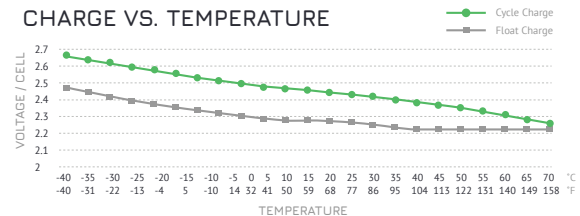
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	800Ah
WEIGHT	~ 51 kg / 112.4 lbs
DIMENSIONS	Height: 337 mm (13.3") Length: 412 mm (16.2") Width: 175 mm (6.9")
CAPACITY 25 °C (77 °F)	120 hour rate (8.0A) - 960Ah 20 hour rate (44A) - 880Ah 10 hour rate (80A) - 800Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25 °C (77 °F)	< 0.2mΩ
SELF DISCHARGE 25 °C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	8000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 240A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



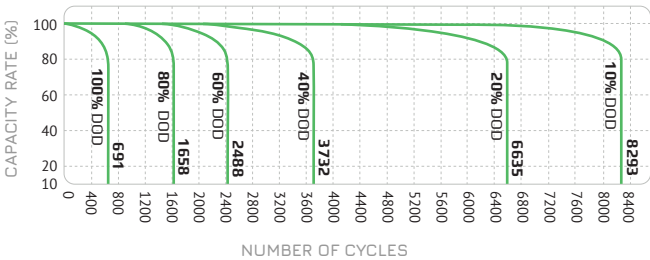
DATASHEET - CB2-800LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART																			
Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23

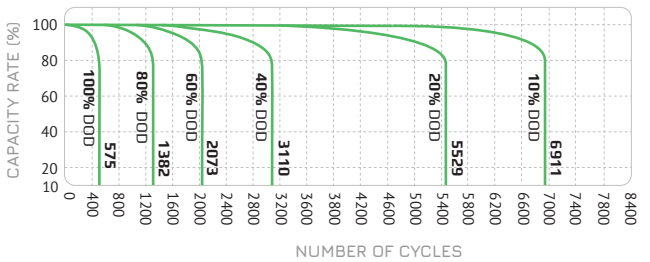
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	2161.92	1379.2	908.8	684	559.2	333.6	242.4	188.4	160	137.6	104	84	70.8	44.24	37.07
1.67V	1860.77	1250.4	842.4	648	541.6	318.4	230.4	186.4	152	136	102.4	82.4	70.8	44.24	37.07
1.70V	1777.63	1212	816	640	523.2	313.6	225.6	184.8	151.2	135.2	101.6	81.6	70.8	44.16	36.96
1.75V	1615.97	1134.4	784	615.2	506.4	301.6	219.2	180	146.4	132	100	80.8	70.16	44.16	36.88
1.80V	1428.77	1039.2	754.4	592.8	484.8	291.2	216	176.8	143.2	128.8	97.6	80	68.64	44	36.72
1.83V	1247.23	949.6	696.8	550.93	458.4	278.4	208	169.6	136.8	124	94.4	77.6	66.8	43.84	35.68
1.85V	1066.37	860	640	509.6	432.8	266.4	200	163.2	131.2	120	91.2	75.44	64.88	43.76	34.64

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	3584.77	2413.61	1651.99	1259.2	1043.2	636.8	464	360.79	307.2	269.6	204	166.27	139.2	86.4	72.48
1.67V	3202.37	2250.4	1546.4	1204.8	1016	616.96	452.8	359.2	297.6	266.4	199.96	162.4	139.2	86.4	72.48
1.70V	3099.11	2191.96	1504.01	1192	987.19	600.8	434.4	356.8	292	264.79	199.3	160.8	139.2	86.4	72.4
1.75V	2860.82	2060.78	1454.4	1155.21	960	580.83	424	351.2	284.8	260.8	195.2	159.18	139.2	86.4	72.32
1.80V	2593.59	1899.21	1404.78	1118.39	923.99	561.6	419.2	344.82	277.6	256.8	192	157.6	135.2	85.6	72.16
1.83V	2290.43	1758.37	1311.99	1048	877.6	540.8	404.8	333.6	268	249.6	185.61	153.6	132	85.6	70.32
1.85V	1987.2	1617.54	1219.19	977.6	832	519.99	390.4	321.6	257.6	242.4	179.2	149.6	128.8	84.8	68.56

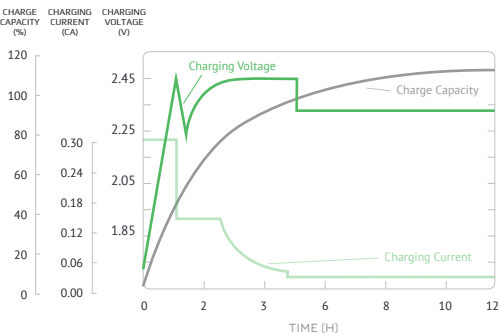
CYCLE LIFE CURVE GRAPH 25°C (77°F).



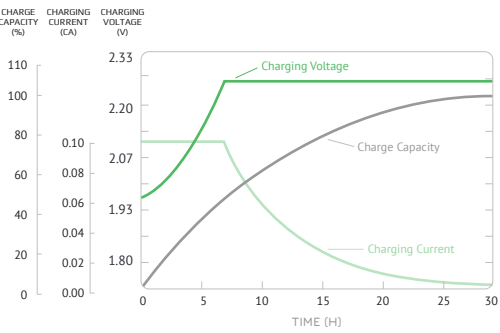
CYCLE LIFE CURVE GRAPH 40°C (104°F).



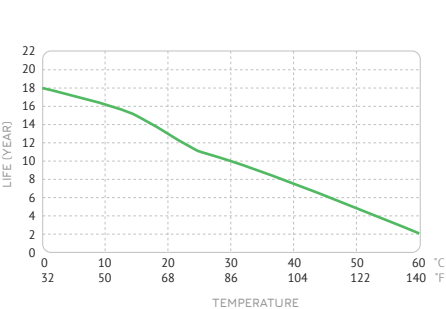
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



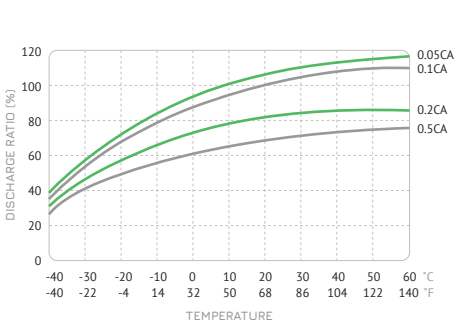
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET



CRYSTAL TECHNOLOGY

Our unique electrolyte crystalizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

CB2-1000LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.

TECHNICAL SPECIFICATIONS

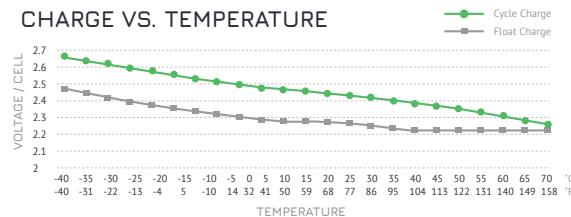
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	1000Ah
WEIGHT	~ 61 kg / 134.5 lbs
DIMENSIONS	Height: 340 mm (13.4") Length: 480 mm (18.9") Width: 175 mm (6.9")
CAPACITY 25 °C (77 °F)	120 hour rate (10A) - 1200Ah 20 hour rate (55A) - 1100Ah 10 hour rate (100A) - 1000Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25°C (77 °F)	< 0.15mΩ
SELF DISCHARGE 25°C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	10000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 300A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



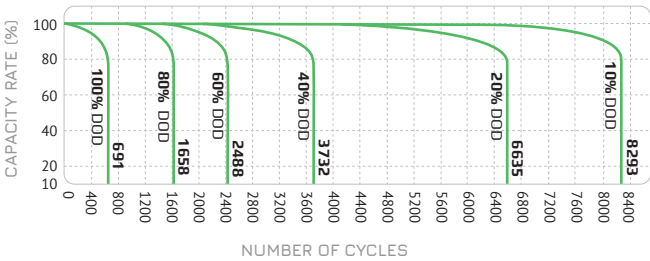
DATASHEET - CB2-1000LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART																	
Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23

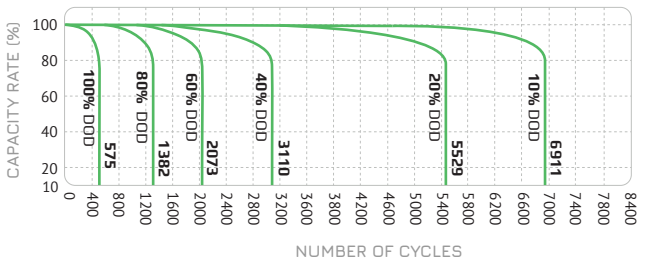
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	3669	1942	1173	855	689	394	286	224	191	163	124	103	86.8	56.5	46.1
1.67V	3410	1878	1156	849	687	393	281	223	189	161	124	102	86.7	56.3	46.0
1.70V	3375	1849	1144	838	682	389	279	222	186	160	123	102	86.4	56.1	45.9
1.75V	3092	1791	1133	832	670	382	278	219	184	158	123	101	86.0	55.9	45.8
1.80V	2774	1676	1086	809	653	376	272	214	182	157	122	100	85.5	54.0	45.7
1.83V	2652	1537	1069	780	624	372	266	209	178	151	119	95.9	82.0	53.4	45.1
1.85V	2485	1491	1000	751	606	357	259	206	173	146	118	94.8	80.9	52.8	44.7

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	6131	3409	2196	1600	1287	745	545	431	364	313	241	199	168	112	91.8
1.67V	5837	3357	2107	1589	1288	745	538	430	364	312	241	199	168	112	91.8
1.70V	5802	3334	2106	1580	1277	739	536	429	358	310	239	197	166	111	91.8
1.75V	5403	3294	2108	1572	1271	734	535	428	357	308	238	196	166	111	91.3
1.80V	4958	3126	2063	1560	1265	733	530	421	355	308	237	195	164	108	91.3
1.83V	4785	2872	2045	1514	1213	728	520	413	351	298	236	189	163	107	90.7
1.85V	4432	2808	1901	1456	1179	710	505	408	341	292	226	187	160	106	90.1

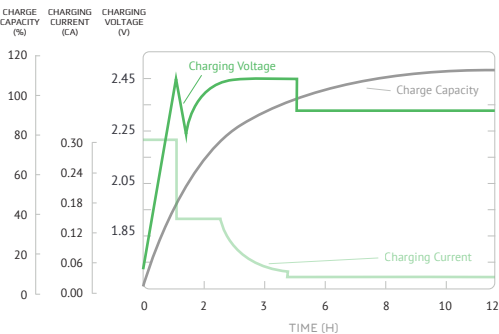
CYCLE LIFE CURVE GRAPH 25°C (77°F).



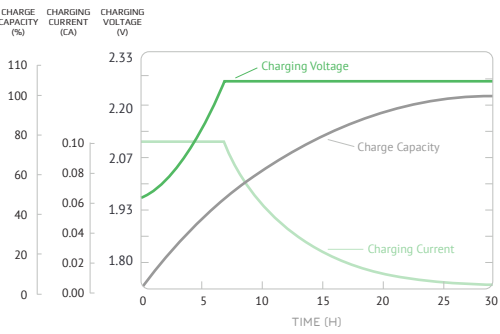
CYCLE LIFE CURVE GRAPH 40°C (104°F).



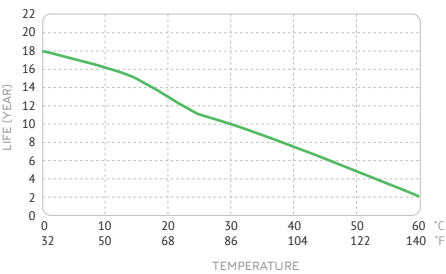
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



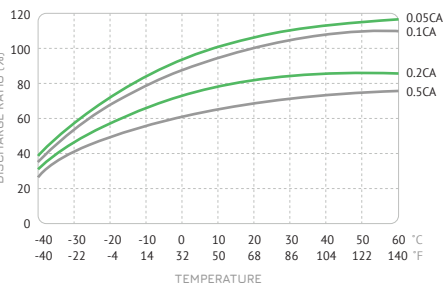
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET

CB2-1200LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.



CRYSTAL TECHNOLOGY

Our unique electrolyte crystallizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

TECHNICAL SPECIFICATIONS

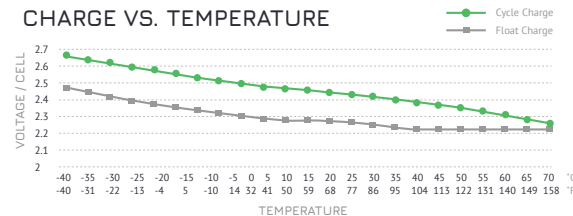
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	1200Ah
WEIGHT	~ 73.2 kg / 161.4 lbs
DIMENSIONS	Height: 342 mm (13.5") Length: 401 mm (15.8") Width: 351 mm (13.8")
CAPACITY 25 °C (77 °F)	120 hour rate (12A) - 1440Ah 20 hour rate (66A) - 1320Ah 10 hour rate (120A) - 1200Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25 °C (77 °F)	< 0.13mΩ
SELF DISCHARGE 25 °C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	12000A (5s)
TERMINAL	F4
(CHARGING) CYCLE	Initial Charging Current 360A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



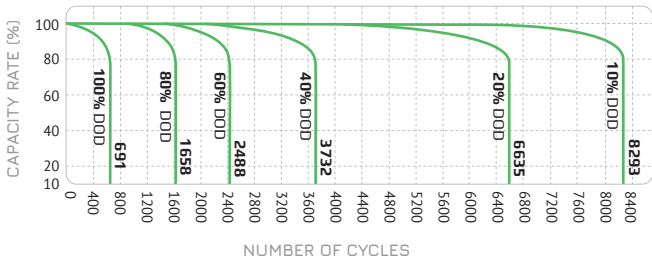
DATASHEET - CB2-1200LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART																			
Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23

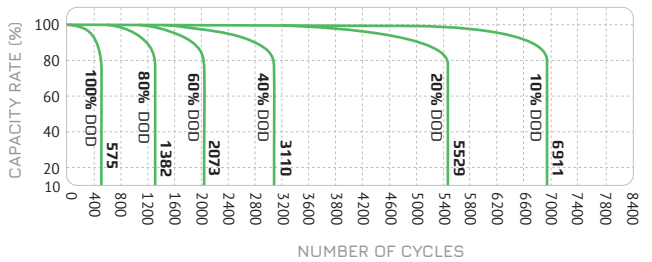
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	3242.88	2068.8	1363.2	1026.0	838.80	500.40	363.60	282.60	240.00	206.40	156.00	126.00	106.20	66.36	55.60
1.67V	2791.15	1875.6	1263.6	972.00	812.40	477.60	345.60	279.60	228.00	204.00	153.60	123.60	106.20	66.36	55.60
1.70V	2666.45	1818.0	1224.0	960.00	784.80	470.40	338.40	277.20	226.80	202.80	152.40	122.40	106.20	66.24	55.44
1.75V	2423.95	1701.6	1176.0	922.80	759.60	452.40	328.80	270.00	219.60	198.00	150.00	121.20	105.24	66.24	55.32
1.80V	2143.15	1558.8	1131.6	889.20	727.20	436.80	324.00	265.20	214.80	193.20	146.40	120.00	102.96	66.00	55.08
1.83V	1870.85	1424.4	1045.2	826.40	687.60	417.60	312.00	254.40	205.20	186.00	141.60	116.40	100.20	65.76	53.52
1.85V	1599.55	1290.0	960.00	764.40	649.20	399.60	300.00	244.80	196.80	180.00	136.80	113.16	97.32	65.64	51.96

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	5377.15	3620.42	2477.99	1888.80	1564.80	955.20	696.0	541.18	460.80	404.40	306.00	249.40	208.80	129.60	108.72
1.67V	4803.55	3375.60	2319.60	1807.20	1524.00	925.44	679.2	538.80	446.40	399.60	299.94	243.60	208.80	129.60	108.72
1.70V	4648.66	3287.95	2256.01	1788.00	1480.79	901.20	651.6	535.20	438.00	397.19	298.96	241.20	208.80	129.60	108.60
1.75V	4291.23	3091.17	2181.59	1732.81	1440.01	871.25	636.0	526.80	427.20	391.20	292.80	238.76	208.80	129.60	108.48
1.80V	3890.39	2848.81	2107.18	1677.59	1385.99	842.40	628.8	517.23	416.40	385.20	288.00	236.40	202.80	128.40	108.24
1.83V	3435.65	2637.56	1967.98	1572.00	1316.39	811.19	607.2	500.40	402.00	374.40	278.41	230.40	198.00	128.40	105.48
1.85V	2980.80	2426.32	1828.79	1466.40	1248.00	779.99	585.6	482.40	386.40	363.60	268.80	224.40	193.20	127.20	102.84

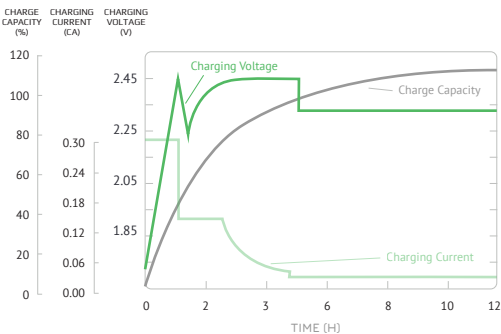
CYCLE LIFE CURVE GRAPH 25°C (77°F).



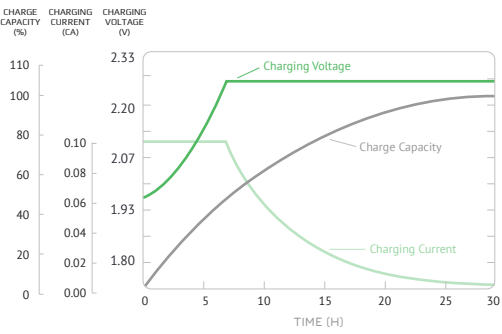
CYCLE LIFE CURVE GRAPH 40°C (104°F).



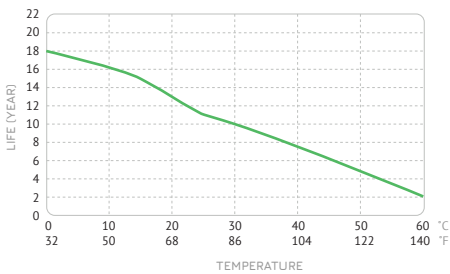
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



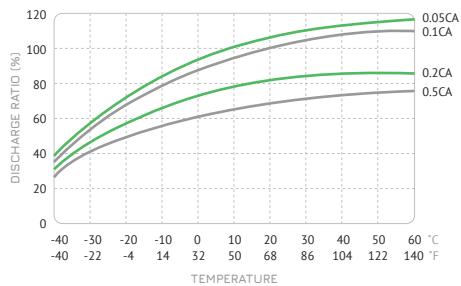
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET

CB2-1500LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.



CRYSTAL TECHNOLOGY

Our unique electrolyte crystallizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40°C (40°F) to +65°C (149°F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25°C (50% DoD).

TECHNICAL SPECIFICATIONS

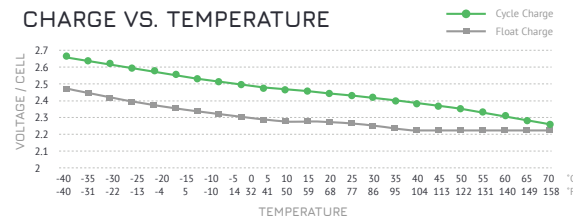
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	1500Ah
WEIGHT	~ 98.5 kg / 217.2 lbs
DIMENSIONS	Height: 350 mm (13.8") Length: 403 mm (15.9") Width: 354 mm (13.9")
CAPACITY 25 °C (77 °F)	120 hour rate (15A) - 1800Ah 20 hour rate (82.5A) - 1650Ah 10 hour rate (150A) - 1500Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25°C (77 °F)	< 0.10mΩ
SELF DISCHARGE 25°C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	15000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 450A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



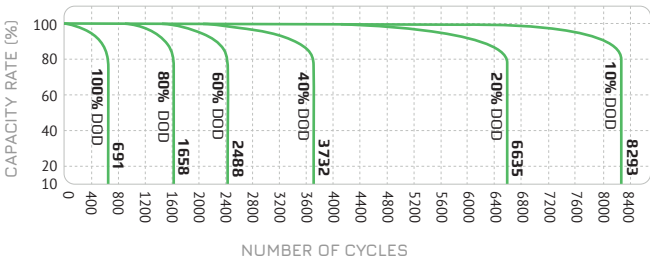
DATASHEET - CB2-1500LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART																			
Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23

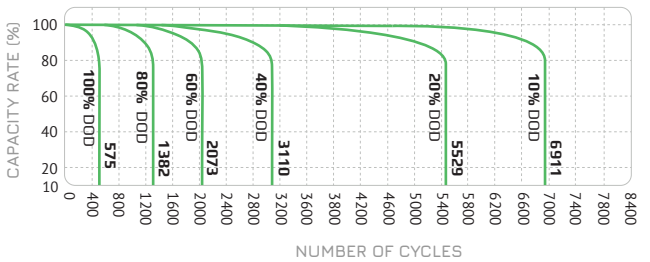
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	4053.60	2586.0	1704.0	1282.5	1048.5	625.50	454.50	454.50	300.00	258.00	195.00	157.50	132.75	82.95	69.50
1.67V	3488.94	2344.5	1579.5	1215.0	1015.5	597.00	432.00	432.00	285.00	255.00	192.00	154.50	132.75	82.95	69.50
1.70V	3333.06	2272.5	1530.0	1200.0	981.00	588.00	423.00	423.00	283.50	253.50	190.50	153.00	132.75	82.80	69.30
1.75V	3029.94	2127.0	1470.0	1153.5	949.50	565.50	411.00	411.00	274.50	247.50	187.50	151.50	131.55	82.80	69.15
1.80V	2678.94	1948.5	1414.5	1111.5	909.00	546.00	405.00	405.00	268.50	241.50	183.00	150.00	128.70	82.50	68.85
1.83V	2338.56	1780.5	1306.5	1033.0	859.50	522.00	390.00	390.00	256.50	232.50	177.00	145.50	125.25	82.20	66.90
1.85V	1999.44	1612.5	1200.0	955.50	811.50	499.50	375.00	375.00	246.00	225.00	171.00	141.45	121.65	82.05	64.95

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	6721.44	4525.52	3097.49	2361.01	1956.00	1194.00	870	676.47	576.00	505.50	382.50	311.75	261.00	162.00	135.90
1.67V	6004.44	4219.50	2899.51	2259.00	1905.00	1156.79	849	673.50	558.00	499.50	374.93	304.50	261.00	162.00	135.90
1.70V	5810.83	4109.93	2820.02	2235.00	1850.98	1126.51	814.5	669.00	547.50	496.49	373.70	301.50	261.00	162.00	135.75
1.75V	5364.03	3863.96	2726.99	2166.02	1800.01	1089.07	795	658.50	534.00	489.00	366.00	298.46	261.00	162.00	135.60
1.80V	4862.98	3561.01	2633.97	2096.99	1732.49	1053.00	786	646.53	520.50	481.50	360.00	295.50	253.50	160.50	135.30
1.83V	4294.56	3296.95	2459.98	1965.00	1645.49	1013.99	759	625.50	502.50	468.00	348.01	287.99	247.50	160.50	131.85
1.85V	3725.99	3032.89	2285.99	1833.01	1560.00	974.99	732	603.00	483.00	454.50	336.00	280.50	241.50	159.00	128.55

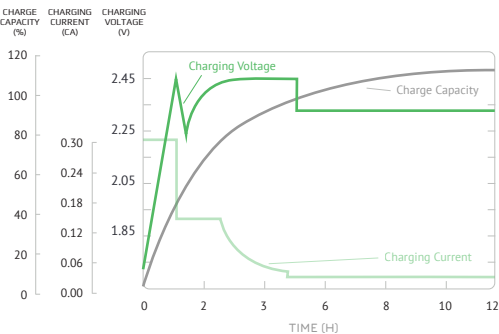
CYCLE LIFE CURVE GRAPH 25°C (77°F).



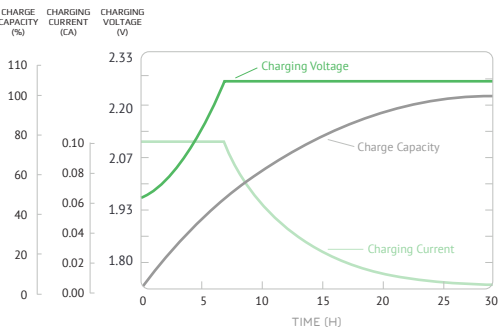
CYCLE LIFE CURVE GRAPH 40°C (104°F).



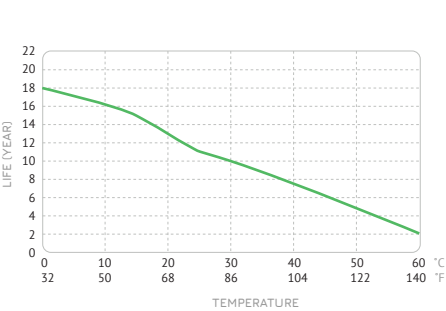
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



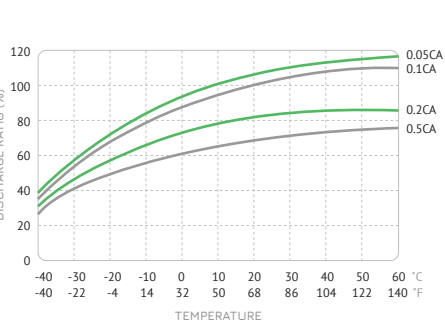
FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.



DATASHEET

CB2-2000LS

CRYSTAL BATTERY™ - LS LARGE STORAGE

Crystal Batteries™ are a unique technology that overcomes conventional battery problems by having a nearly solid-state electrolyte. This allows the battery to be discharged deeper, cycle more often, has a longer lifetime and can withstand extreme temperatures.

The patented Crystal technology uses a unique advanced formula, a new type of composite SiO2 electrolyte developed to completely replace traditional sulphuric acid solutions.



TECHNICAL SPECIFICATIONS

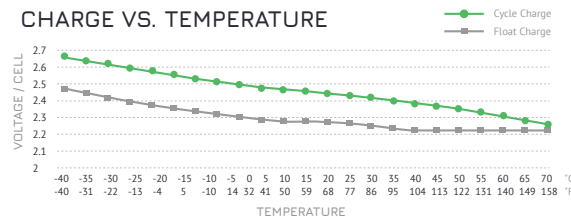
SPECIFICATION

NOMINAL VOLTAGE	2V
RATED CAPACITY (10 HOUR RATE)	2000Ah
WEIGHT	~ 124 kg / 273.4 lbs
DIMENSIONS	Height: 364 mm (14.3") Length: 491 mm (19.3") Width: 351 mm (13.8")
CAPACITY 25 °C (77 °F)	120 hour rate (20A) - 2400Ah 20 hour rate (110A) - 2200Ah 10 hour rate (100A) - 1000Ah
INTERNAL RESISTANCE - FULLY CHARGED BATTERY 25 °C (77 °F)	< 0.09mΩ
SELF DISCHARGE 25 °C (77 °F) (STORAGE CAPACITY)	Capacity after 3 month - 95% Capacity after 6 month - 85% Capacity after 12 month - 80%
MAX DISCHARGE CURRENT 25 °C (77 °F)	20000A (5s)
TERMINAL	M8 (20)
(CHARGING) CYCLE	Initial Charging Current 600A 2.45V / 25 °C (77 °F)
(CHARGING) FLOAT	2.27V / 25 °C (77 °F)

DISCHARGE CURRENT AND END VOLTAGE

DISCHARGE CURRENT (A)	End voltage (V)
0.05C OR BELOW OR INTERMITTENT DISCHARGE	1.9
0.05C OF CURRENT CLOSE TO IT	1.85
0.1C OF CURRENT CLOSE TO IT	1.8
0.2C OF CURRENT CLOSE TO IT	1.75
FROM 0.2C TO 0.5C	1.7
FROM 0.5C TO 1C	1.6
FROM 1C TO 3C	1.5
CURRENT IN EXCESS OF 3C	1.3

CHARGE VS. TEMPERATURE



CRYSTAL TECHNOLOGY

Our unique electrolyte crystallizes on the battery plates, giving the batteries their powerful features.



BETTER USAGE PERFORMANCE

Charges up to three times faster than conventional alternatives. Excellent high-current discharge.



FULL RECOVERY

Crystal Batteries™ can be 100% discharged and restored to full capacity.



PROVEN TRACK RECORD

Crystal Batteries™ have been successfully used in the telecom, industrial EV and storage markets.



THE SAFEST

No risk of thermal runaway, spontaneous combustion, no leakage, and fewer harmful chemicals.



UP TO 99% RECYCLABLE

A sustainable circular economy, less acid, no antimony or cadmium.



EXTREME TEMPERATURES

Extreme temperature resistance. Operates from -40 °C (40 °F) to +65 °C (149 °F).



LONG BATTERY LIFE

A float service life of up to 11 years. Up to 3,100 charge / discharge cycles at 25 °C (50% DoD).

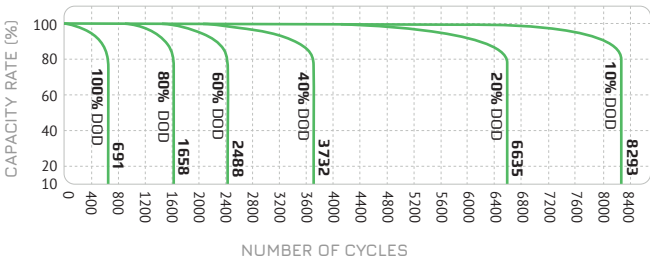
DATASHEET - CB2-2000LS

CELL CHARGE VOLTAGE VS. TEMPERATURE CHART																			
Temperature (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	25	30	35	40	45	50
Temperature (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50	59	68	77	86	95	104	113	122
Cycle Charge	2.66	2.64	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.47	2.47	2.45	2.45	2.43	2.41	2.39	2.37	2.35
Float Charge	2.46	2.44	2.42	2.42	2.38	2.36	2.34	2.32	2.31	2.30	2.29	2.29	2.29	2.27	2.26	2.24	2.23	2.23	2.23

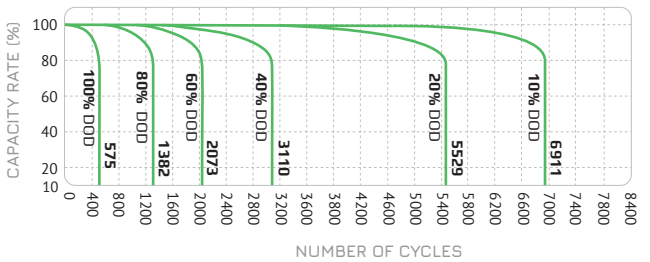
CONSTANT CURRENT DISCHARGE CHARACTERISTICS: UNITS AMPERES 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	5404.8	3448	2272	1710	1398	834	606	471	400	344	260	210	177	110.6	92.67
1.67V	4651.92	3126	2106	1620	1354	796	576	466	380	340	256	206	177	110.6	92.67
1.70V	4444.08	3030	2040	1600	1308	784	564	462	378	338	254	204	177	110.4	92.4
1.75V	4039.92	2836	1960	1538	1266	754	548	450	366	330	250	202	175.4	110.4	92.2
1.80V	3571.92	2598	1886	1482	1212	728	540	442	358	322	244	200	171.6	110	91.8
1.83V	3118.08	2374	1742	1377.33	1146	696	520	424	342	310	236	194	167	109.6	89.2
1.85V	2665.92	2150	1600	1274	1082	666	500	408	328	300	228	188.6	162.2	109.4	86.6

DISCHARGE DATA WITH CONSTANT POWER UNITS: WATTS PER CELL 25°C (77°F)															
End Cell Voltage	5 min	15 min	30 min	45 min	1h	2h	3h	4h	5h	6h	8h	10h	12h	20h	24h
1.60V	8961.92	6034.03	4129.99	3148.01	2608	1592	1160	901.96	768	674	510	415.67	348	216	181.2
1.67V	8005.92	5626	3866.01	3012	2540	1542.39	1132	897.99	744	666	499.9	406	348	216	181.2
1.70V	7747.77	5479.91	3760.02	2980.01	2467.98	1502.01	1086	892	730	661.99	498.26	402	348	216	181
1.75V	7152.05	5151.94	3635.99	2888.02	2400.01	1452.09	1060	878	712	652	488	397.94	348	216	180.8
1.80V	6483.98	4748.02	3511.96	2795.98	2309.98	1404	1048	862.04	694	642	480	394	338	214	180.4
1.83V	5726.08	4395.94	3279.97	2619.99	2193.99	1351.99	1012	834	670	624	464.01	383.99	330	214	175.8
1.85V	4967.99	4043.86	3047.98	2444.01	2080	1299.98	976	804	644	606	448	374	322	212	171.4

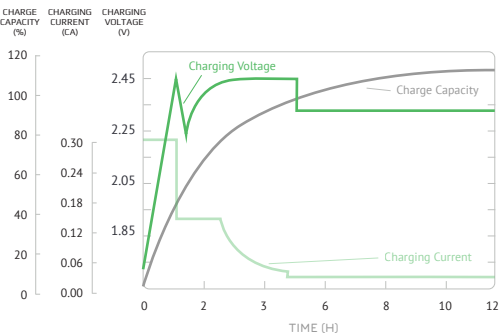
CYCLE LIFE CURVE GRAPH 25°C (77°F).



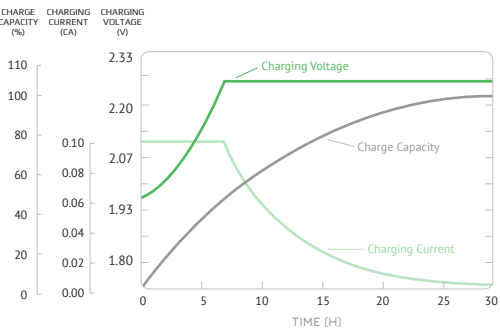
CYCLE LIFE CURVE GRAPH 40°C (104°F).



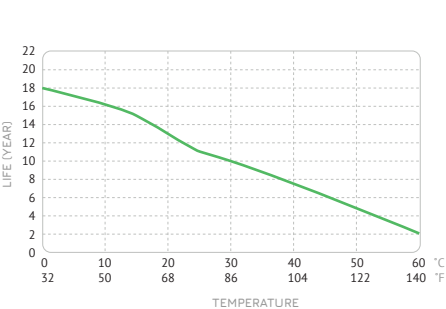
REGULAR CYCLE CHARGE CHARACTERISTICS 25°C (77°F).



FLOATING CHARACTERISTICS 25°C (77°F).



FLOAT SERVICE LIFE CURVE GRAPH.



TEMPERATURE & DISCHARGE CAPACITY.

