

Low Rate (LR) Silvercel® Models

Cell Model	LR1	LR2	LR2.5	LR3	LR4	LR5	LR6	LR8	LR10	LR12	LR15	LR16	LR20	LR21	LR30
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Electrical Characteristics

Nominal capacity (ampere-hours)	1.0	2.0	2.5	3.0	4.0	5.0	6.0	8.0	10.0	12.0	15.0	16.0	20.0	21.0	30.0
Recommended charge rate (amps)	0.05	0.2	0.15	0.25	0.30	0.30	0.24	0.32	0.60	0.5	1.0	1.8	0.8	1.6	1.5

Typical Application Data (@ 70°F)

A. 10-Hour rate discharge (amps)	0.1	0.2	0.25	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.5	1.6	2.0	2.1	3.0
Ampere-hour output	2.4	4.4	4.6	6.0	7.5	9.0	8.0	10.0	17.0	16.0	20.0	19.0	36.0	32.0	46.0
Average voltage	1.53	1.55	1.53	1.52	1.54	1.53	1.52	1.53	1.53	1.52	1.53	1.53	1.50	1.54	1.53
Watt-hours per pound	54	45	59	50	53	51	69	58	52	67	52.5	43	58	53	63
Watt-hours per cubic-inch	3.1	2.7	3.4	3.1	3.4	2.8	4.7	4.3	3.1	4.4	3.3	2.6	3.4	3.5	4.5
B. Max. continuous rate (amps)*	2.5	10.0	8.0	12.0	16.0	15.0	12.0	16.0	30.0	20.0	45.0	80.0	36.0	80.0	75.0
Ampere hour output	1.6	2.8	3.0	4.0	5.0	6.0	5.2	6.4	11.0	11.0	13.0	13.0	24.0	20.0	28.0
Average Voltage	1.30	1.33	1.31	1.33	1.32	1.31	1.30	1.31	1.32	1.32	1.31	1.32	1.29	1.30	1.29

Physical Characteristics

Max. weight filled (ounces)	1.08	2.4	1.9	2.9	3.5	4.3	2.8	4.2	8.0	5.75	9.3	10.8	14.8	14.8	17.7
Overall volume (cubic-inches)**	1.18	2.54	2.03	2.90	3.41	4.83	2.57	3.57	8.25	5.50	9.1	11.3	15.8	14.1	15.7
Overall height (inches)**	2.02	2.50	2.50	2.86	3.36	2.90	2.54	4.73	4.80	3.94	4.94	5.96	4.31	7.54	7.50
Width (inches)	1.08	1.72	1.40	1.72	1.72	2.08	1.58	1.18	2.32	1.86	2.30	2.31	2.09	2.30	2.01
Depth (inches)	0.54	0.59	0.58	0.59	0.59	0.80	0.64	0.64	0.74	0.75	0.80	0.82	1.75	0.81	1.04
Terminal threads	.125-40	.190-32	.164-32	.190-32	.190-32	.190-32	.164-32	.190-32	.250-28	.190-32	.312-24	.312-24	.312-24	.312-24	.312-24

Notes:

Cells are available both in the dry charged and the dry unformed condition.

*Cells will deliver much higher rates for short periods of time. For details, contact Technical Sales Group

Tel: 860.599.1100 — Fax: 860.599.3903 — e-mail: taretakis@yardnev.com

**Including terminals

Low Rate (LR) Silvercel[®] Models

Cell Model	LR40	LR58	LR70	LR90	LR100	LR130	LR140	LR160	LR190	LR200	LR215	LR350	LR360	LR660
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Electrical Characteristics

Nominal capacity (ampere-hours)	40.0	58.0	70.0	90.0	100.0	130.0	140.0	160.0	190.0	200.0	215.0	350.0	360.0	660.0
Recommended charge rate (amps)	1.4	2.5	3.0	3.6	3.6	4.0	7.0	4.0	7.0	7.0	5.0	12.0	10.0	12.0

Typical Application Data (@ 70°F)

A. 10-Hour rate discharge (amps)	4.0	5.8	7.0	9.0	10.0	13.0	14.0	16.0	19.0	20.0	21.5	35.0	36.0	66.0
Ampere-hour output	64.0	96.0	110.0	155.0	125.0	185.0	160.0	235.0	210.0	290.0	230.0	560.0	525.0	1000.0
Average voltage	1.51	1.52	1.52	1.52	1.51	1.50	1.52	1.48	1.50	1.49	1.50	1.49	1.53	1.45
Watt-hours per pound	63	70	71	67	69	70	68	71	70	68	8.2	67	83	89
Watt-hours per cubic-inch	4.2	5.0	5.1	4.6	4.1	5.2	4.8	6.2	5.4	5.0	6.9	5.3	6.9	8.7
B. Max. continuous rate (amps)*	64.0	100.0	120.0	150.0	150.0	125.0	240.0	125.0	200.0	200.0	180.0	350.0	300.0	180.0
Ampere hour output	38.0	58.0	65.0	90.0	75.0	105.0	95.0	150.0	140.0	180.0	180.0	350.0	400.0	630.0
Average Voltage	1.28	1.29	1.31	1.30	1.29	1.30	1.30	1.30	1.33	1.32	1.33	1.32	1.35	1.36

Physical Characteristics

Max. weight filled (ounces)	24.6	33.2	37.8	56.0	43.0	64.0	57.2	78.2	72.2	102.0	67.1	198.0	155.2	218.0
Overall volume (cubic-inches)**	22.8	29.3	33.0	51.2	46.0	53.7	50.3	56.0	58.8	86.4	49.9	157.0	117.1	139.0
Overall height (inches)**	7.10	6.98	6.12	7.09	4.81	6.55	6.85	6.50	6.40	10.94	6.90	8.75	7.36	7.00
Width (inches)	3.25	3.28	3.64	3.28	3.44	3.28	3.31	2.97	5.97	4.20	3.29	4.23	5.83	6.35
Depth (inches)	0.99	1.28	1.48	2.20	2.78	2.50	2.22	2.90	1.54	1.88	2.20	4.23	2.73	3.12
Terminal threads	.312-24	.250-28	.312-18	.312-24	.312-24	.312-24	.375-24 ¹	.375-24 ¹	.375-24	.375-24	.375-24 ¹	.312-24	.437-20	.375-24

Notes:

Cells are available both in the dry charged and the dry unformed condition.

¹Four terminals

*Cells will deliver much higher rates for short periods of time. For details, contact Technical Sales Group

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**Including terminals

High Rate (HR) Silvercel® Models

Cell Model	HR05	HR1	HR1.5	HR2	HR3	HR4	HR5	HR10	HR13	HR15	HR18	HR20	HR21
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Electrical Characteristics

Nominal capacity(ampere-hours)	0.5	1.0	1.5	2.0	3.0	4.0	5.0	10.0	13.0	15.0	18.0	20.0	21.0
Recommended charge rate (amps)	0.06	0.10	0.125	0.3	0.4	0.5	0.5	0.7	1.8	1.35	2.0	2.0	2.5

Typical Application Data (@ 70°F)

A. 60-Minute rate discharge (amps)	0.5	1.0	1.5	2.0	3.0	4.0	5.0	10.0	13.0	15.0	18.0	20.0	21.0
Ampere-hour output	1.3	2.0	2.8	4.5	5.4	6.8	8.5	16.0	20.0	21.0	28.0	26.0	34.0
Average voltage	1.48	1.48	1.48	1.48	1.50	1.49	1.48	1.45	1.51	1.48	1.49	1.47	1.48
Watt-hours per pound	41	43	51	44	44	46	45	45	51	49	51	45	52
Watt-hours per cubic-inch	2.1	2.5	3.0	2.6	2.8	3.0	2.6	2.8	3.4	3.4	3.5	2.5	3.6
B. 20-Minute rate discharge (amps)	1.5	3.0	4.5	6.0	9.0	12.0	15.0	30.0	39.0	45.0	54.0	60.0	63.0
Ampere hour output	1.2	1.8	2.6	4.1	5.0	6.0	7.2	13.0	19.0	18.0	25.0	22.0	30.0
Average Voltage	1.43	1.41	1.40	1.42	1.44	1.43	1.41	1.37	1.45	1.41	1.42	1.41	1.42
C. Maximum continuous rate (amps)*	4.0	6.0	8.0	14.0	25.0	30.0	30.0	40.0	150.0	90.0	120.0	120.0	160.0
Ampere-hour output	0.9	1.5	1.9	3.2	3.75	4.5	6.0	10.5	15.0	14.0	18.0	17.5	23.0
Average voltage	1.35	1.36	1.35	1.34	1.35	1.34	1.32	1.32	1.34	1.32	1.33	1.33	1.33

Physical Characteristics

Maximum weight filled (ounces)	0.75	1.1	1.3	2.4	2.9	3.5	4.5	8.25	9.4	10.0	13.0	13.5	15.5
Overall volume (cubic-inches)**	0.91	1.18	1.35	2.54	2.90	3.41	4.83	8.25	8.85	9.1	12.0	15.2	14.1
Overall height (inches)**	1.56	2.02	2.32	2.50	2.86	3.36	2.90	4.80	4.74	4.94	7.00	4.28	7.54
Width (inches)	1.08	1.08	1.08	1.72	1.72	1.72	2.08	2.32	2.30	2.30	2.12	2.05	2.30
Depth (inches)	0.54	0.54	0.54	0.59	0.59	0.59	0.80	0.74	.81	0.80	0.81	1.73	0.81
Terminal threads	.125-40	.125-40	.125-40	.190-32	.190-32	.190-32	.190-32	.250-28	.312-24	.312-24	.312-24	.312-24	.312-24

Notes:

Cells are available both in the dry charged and the dry unformed condition

*Cells will deliver much higher rates for short periods of time. For details, contact Technical Sales Group

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**Including terminals

High Rate (HR) Silvercel® Models

Cell Model	HR35	HR40	HR56	HR58	HR60	HR90	HR100	HR140	HR160	HR190	HR200	HR215	HR300
Electrical Characteristics													
Nominal capacity (ampere-hours)	35.0	40.0	56.0	58.0	60.0	90.0	100.0	140.0	160.0	190.0	200.0	215.0	300.0
Recommended charge rate (amps)	2.5	3.0	4.0	3.0	4.0	10.0	6.0	10.0	8.0	15.0	10.0	5.5	12.0
Typical Application Data (@ 70°F)													
A. 60-Minute rate discharge (amps)	35.0	40.0	56.0	58.0	60.0	90.0	100.0	140.0	160.0	190.0	200.0	215.0	300.0
Ampere-hour output	42.0	60.0	75.0	96.0	80.0	120.0	120.0	145.0	195.0	210.0	310.0	260.0	365.0
Average voltage	1.46	1.46	1.48	1.43	1.45	1.48	1.42	1.46	1.42	1.45	1.42	1.39	1.41
Watt-hours per pound	47	58	56	71	57	55	60	56	66	62	70	74	71
Watt-hours per cubic-inch	3.4	3.8	3.9	4.6	4.0	3.6	3.8	4.1	4.9	5.1	5.3	6.5	6.1
B. 20-Minute rate discharge (amps)	105.0	120.0	168.0	174.0	180.0	270.0	300.0	420.0	480.0	570.0	—	—	—
Ampere hour output	34.0	51.0	61.0	66.0	64.0	103.0	75.0	124.0	120.0	168.0	—	—	—
Average Voltage	1.38	1.37	1.40	1.35	1.37	1.43	1.29	1.37	1.30	1.38	—	—	—
C. Maximum continuous rate (amps)*	160.0	180.0	300.0	180.0	250.0	600.0	300.0	600.0	480.0	800.0	360.0	300.0	750.0
Ampere-hour output	26.0	37.5	45.0	63.0	50.0	80.0	—	102.0	—	120.0	200.0	230.0	300.0
Average voltage	1.32	1.32	1.31	1.34	1.32	1.33	—	1.35	—	1.33	1.37	1.31	1.31

Physical Characteristics													
Maximum weight filled (ounces)	21.0	24.0	31.6	31.0	32.8	52.0	45.0	60.7	66.7	78.2	101.0	78.6	116.5
Overall volume (cubic-inches)**	17.9	22.8	28.6	29.9	29.0	49.7	45.0	51.4	56.8	59.4	82.7	55.4	84.7
Overall height (inches)**	7.03	7.10	6.27	7.25	4.50	7.06	4.70	7.10	6.51	6.46	10.94	5.65	5.85
Width (inches)	3.14	3.25	2.195	3.25	2.73	3.26	3.44	3.29	2.99	5.97	4.20	4.34	6.41
Depth (inches)	0.81	0.99	2.08	1.27	2.36	2.16	2.78	2.20	2.92	1.54	1.80	2.26	2.26
Terminal threads	.312-24	.312-24	M10x1.5 ¹	.437-20	.312-24	.312-24	.312-24	.375-24	.312-24	.500-20	.375-24	.500-20	.500-20

Notes:

Cells are available both in the dry charged and the dry unformed condition

¹ Metric

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**Including terminals

Primary (PM) Silvercel® Models

Cell Model	PM1	PMV2	PM3	PML4	PM5	PMC5	PMC10	PM15	PMV16	PM30	PM58	PML400	PML2500
Electrical Characteristics													
Nominal capacity (ampere-hours)	1.0	2.0	3.0	4.0	5.0	5.0	10.0	15.0	16.0	30.0	58.0	400	2500
Recommended charge rate (amps)	0.15	0.6	0.4	0.5	0.5	0.4	0.75	2.0	4.0	5.0	7.5	3.0	15.0
Typical Application Data (@ 70°F)													
A. 60-Minute rate discharge (amps)	1.0	2.0	3.0	4.0	5.0	5.0	10.0	15.0	16.0	30.0	58.0	20.0***	100.0***
Ampere-hour output	2.2	5.5	7.2	9.2	10.0	12.5	29.0	21.0	26.0	44.0	64.0	400.0	2750.0
Average voltage	1.52	1.54	1.51	1.51	1.49	1.49	1.47	1.51	1.53	1.52	1.52	1.50	1.50
Watt-hours per pound	49	50	58	60	54	65	70	49	49	50	46	106	103
Watt-hours per cubic-inch	2.8	3.2	3.7	4.0	3.1	3.8	5.2	3.4	3.5	3.1	3.2	10.1	12.3
B. 20-Minute rate discharge (amps)	3.0	6.0	9.0	12.0	15.0	15.0	30.0	45.0	48.0	90.0	174.0	—	—
Ampere hour output	1.8	4.6	6.1	7.8	8.5	10.5	24.0	18.0	22.0	37.0	53.0	—	—
Average Voltage	1.45	1.49	1.44	1.44	1.40	1.39	1.37	1.44	1.49	1.46	1.44	—	—
C. Maximum continuous rate (amps)*	15.0	50.0	40.0	50.0	40.0	40.0	64.0	200.0	360.0	400.0	750.0	120.0	600.0
Ampere-hour output	1.3	3.0	4.3	5.5	6.0	7.5	17.5	12.0	15.0	26.0	34.0	330.0	2300.0
Average voltage	1.26	1.28	1.26	1.27	1.28	1.26	1.27	1.27	1.27	1.30	1.27	1.38	1.36
Physical Characteristics													
Maximum weight filled (ounces)	1.1	2.7	3.0	3.7	4.4	4.6	9.7	10.4	13.0	21.4	33.4	90.0	640.0
Overall volume (cubic-inches)**	1.18	2.61	2.95	3.47	4.83	4.83	8.1	9.2	11.4	21.4	29.9	59.4	336.0
Overall height (inches)**	2.02	2.53	2.86	3.36	2.90	2.90	4.72	4.94	6.13	6.55	7.25	6.34	18.86
Width (inches)	1.08	1.72	1.72	1.72	2.08	2.08	2.32	2.32	2.30	3.26	3.25	6.01	4.22
Depth (inches)	0.54	0.60	0.60	0.60	0.80	0.80	0.74	0.80	0.81	1.00	1.27	1.56	4.22
Terminal threads	.125-40	.190-32	.190-32	.190-32	.190-32	.190-32	.250-28	.312-24	.312-24	.312-24	.500-20	.312-24	.750-16

Notes:

PMC – High capacity design

PMV – High rate design

PML – Long life design (1.5 to 3 times longer than standard PM cells).

All cells are provided dry charged.

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**Including terminals

***Cell designed for low rate application.