STARMAX

OPzV TUBULAR GEL BATTERIES

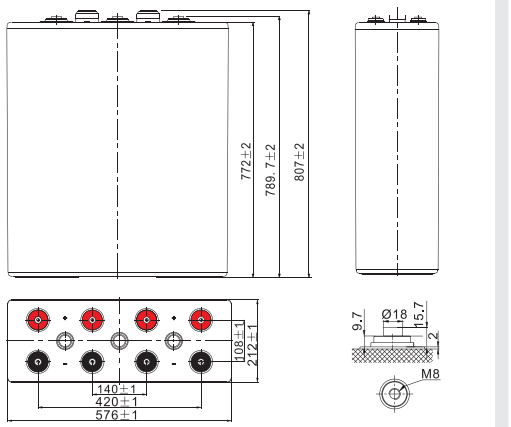
OPzV3000-2

UPS

www.starmaxbatteries.com

OPzV3000-2 (2V 3000Ah)

LAYOUT



General Features

- 20 years design life(20°C)
- Better recovery performance
- Wide working temperature range (-20~55)°C
- No electrolyte stratification provides longer service life
- High recombination efficient
- Build in copper core based in lead will carry large current
- Separator imported form AMER-SIL high porosity. PVC-SiO_2 and low resistance
- Pasted negative plate special grid design increase the active material. Availablity large current discharge and charge ability
- Tubuler type positive plate (polyester tube) prevent the active material from falling. Muti metal alloy pressed positive grid increase the anti corrosion ablity and service life

Applications

- Green energy systems (solar, wind, hydro, etc)
- Telecommunications installations
- Solar power stations
- Alarm installations
- Railway crossing
- Street lightening
- Pump systems
- Signal station
- Street signs
- Traffic lights
- Lawn lamp

Standards

- ACC. to IEC 60896, IEC 61427, DIN 40742 standards
- UL, CE Certified
- Manufactured by Starmax, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

SPECIFICATIONS

Rated Voltage	2V	
Nominal Capacity	3000Ah	C_{10} ,1.80V/cell
Dimensions	Length	576mm(22.68 in.)
	Width	212mm(8.34 in.)
	Container height	772mm(30.39 in.)
	Total height	807mm(31.77 in.)
Approx. weight	232.0Kg (511.47 lbs)	
Terminal	M8	
Container material	ABS	
Rated capacity (25°C)	3900.0 Ah	(100hr,39.0A,1.80V/cell)
	3000.0 Ah	(10hr,300.0A,1.80V/cell)
	2616.5Ah	(5hr,523.3A,1.75V/cell)
	2322.6 Ah	(3hr,774.2A,1.75V/cell)
	1673.8 Ah	(1hr,1673.8A,1.67V/cell)
Max. discharge current	24000A	
Internal resistance (25°C)	Approx.0.23mΩ	
Operating temp. range	Discharge	-20°C~55°C (-4°F~131°F)
	Charge	0°C~40°C (32°F~104°F)
	Storage	-20°C~50°C (-4°F~122°F)
Nominal operating temp. range	25±3℃ (77±5°F)	
Cycle Use	750.0A	
Effect of temp. to Capacity	Float	2.25V
	Temp. Coefficient	-3mV/cell/°C
	Cycle(Equalization)	2.35~2.40V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self discharge	≤3% per month at 25°C	

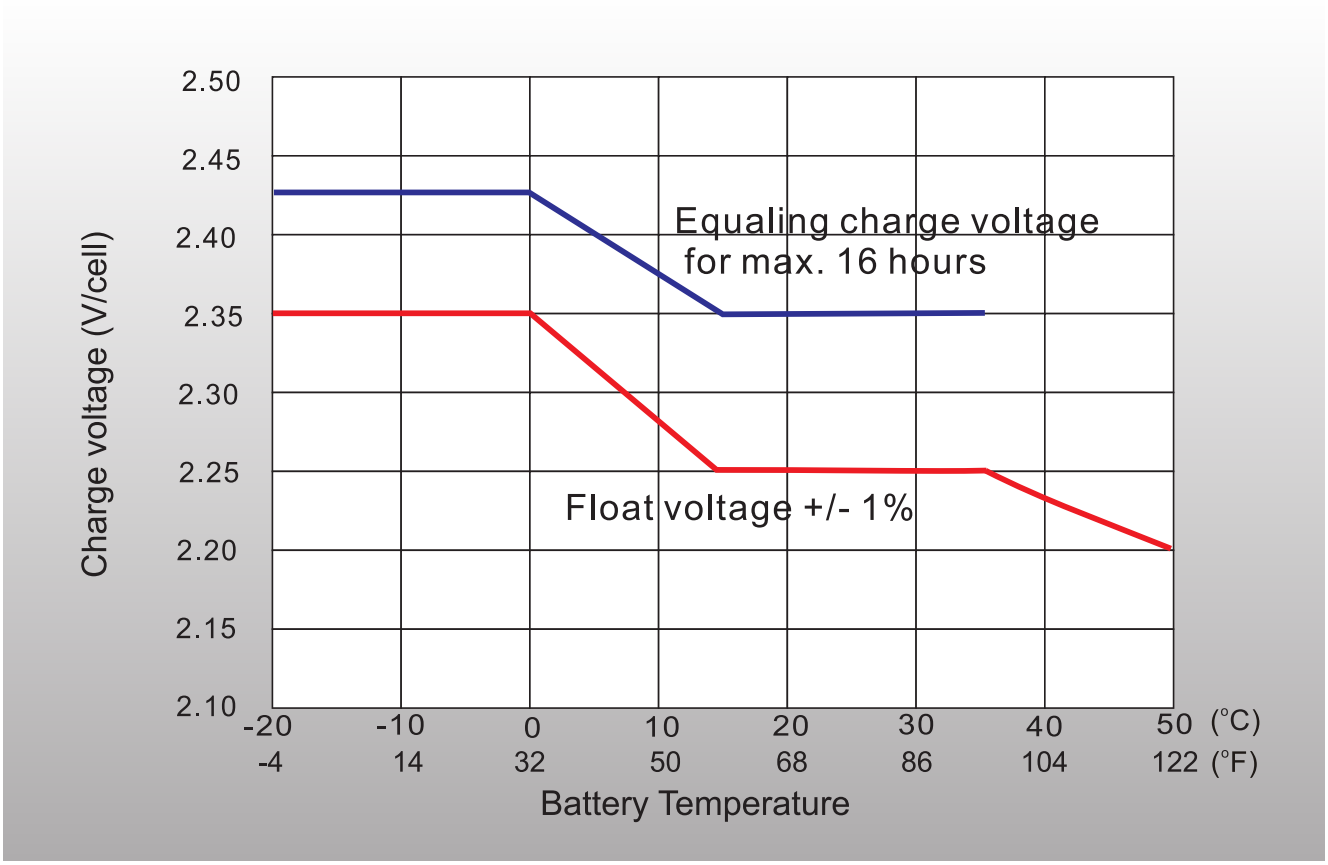
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	1340.7	906.7	696.0	476.1	333.7	281.1	133.5	69.8	50.2	38.0	32.8
1.80V/cell	1503.0	993.0	757.0	513.0	357.0	300.0	138.1	72.5	52.1	39.0	33.8
1.75V/cell	1562.8	1027.5	774.2	523.3	363.0	305.1	139.0	74.1	53.4	39.8	34.3
1.70V/cell	1631.1	1053.4	789.7	531.0	368.2	308.6	141.3	75.6	53.9	40.4	34.7
1.67V/cell	1673.8	1070.7	804.3	539.6	372.5	311.1	142.5	76.4	54.4	41.0	35.2
1.60V/cell	1699.4	1088.0	813.7	544.7	375.1	313.7	143.8	77.2	54.8	41.5	35.6

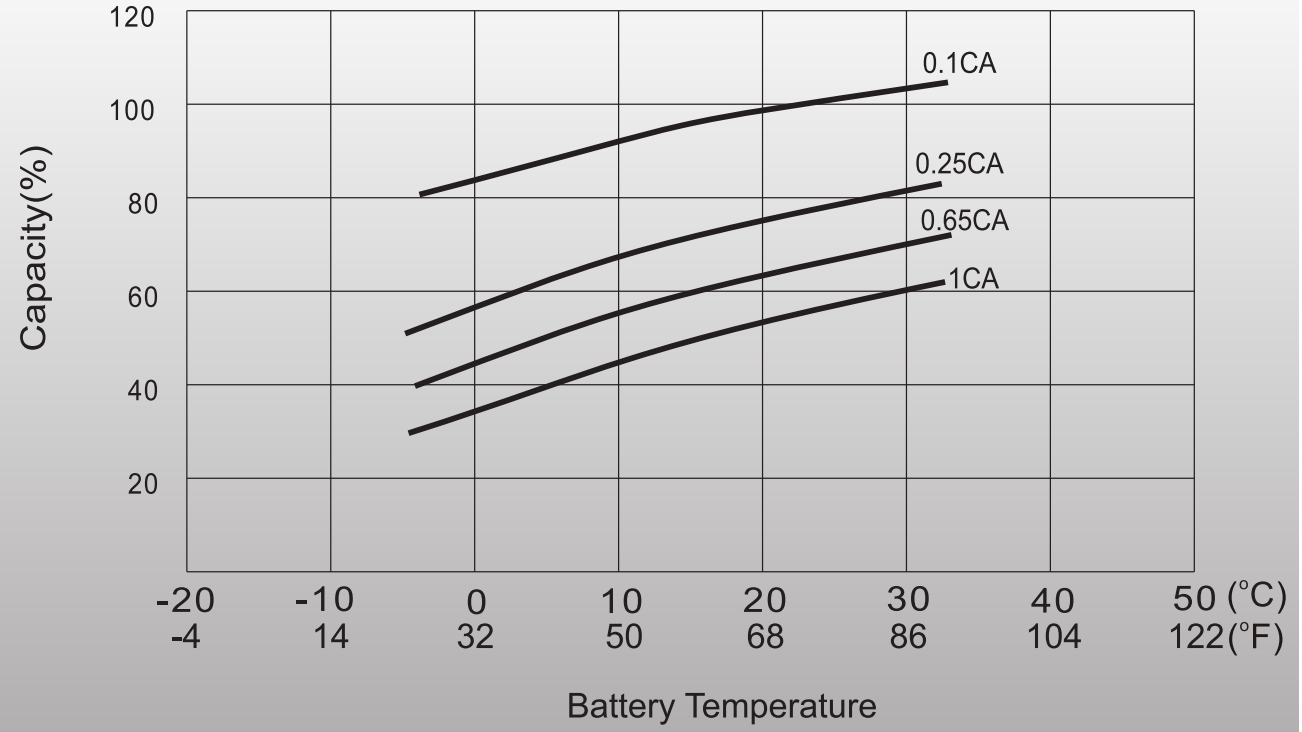
Constant Power Discharge (Watts/Cell) at 25°C (77°F)

F.V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	2587.6	1761.5	1357.6	935.1	661.4	558.9	266.9	139.7	100.8	76.5	66.1
1.80V/cell	2895.0	1925.6	1469.3	1003.7	707.1	595.7	275.7	144.9	104.4	78.3	67.9
1.75V/cell	2988.9	1968.7	1495.1	1020.9	717.4	604.3	277.2	148.1	107.0	79.8	68.8
1.70V/cell	3091.4	2011.9	1520.9	1038.0	725.2	610.3	281.4	150.8	107.9	80.9	69.7
1.67V/cell	3151.2	2046.4	1546.7	1046.6	732.1	615.4	283.6	152.2	108.7	82.2	70.5
1.60V/cell	3185.3	2063.7	1555.2	1055.2	735.6	618.9	285.6	153.7	109.3	82.9	71.2

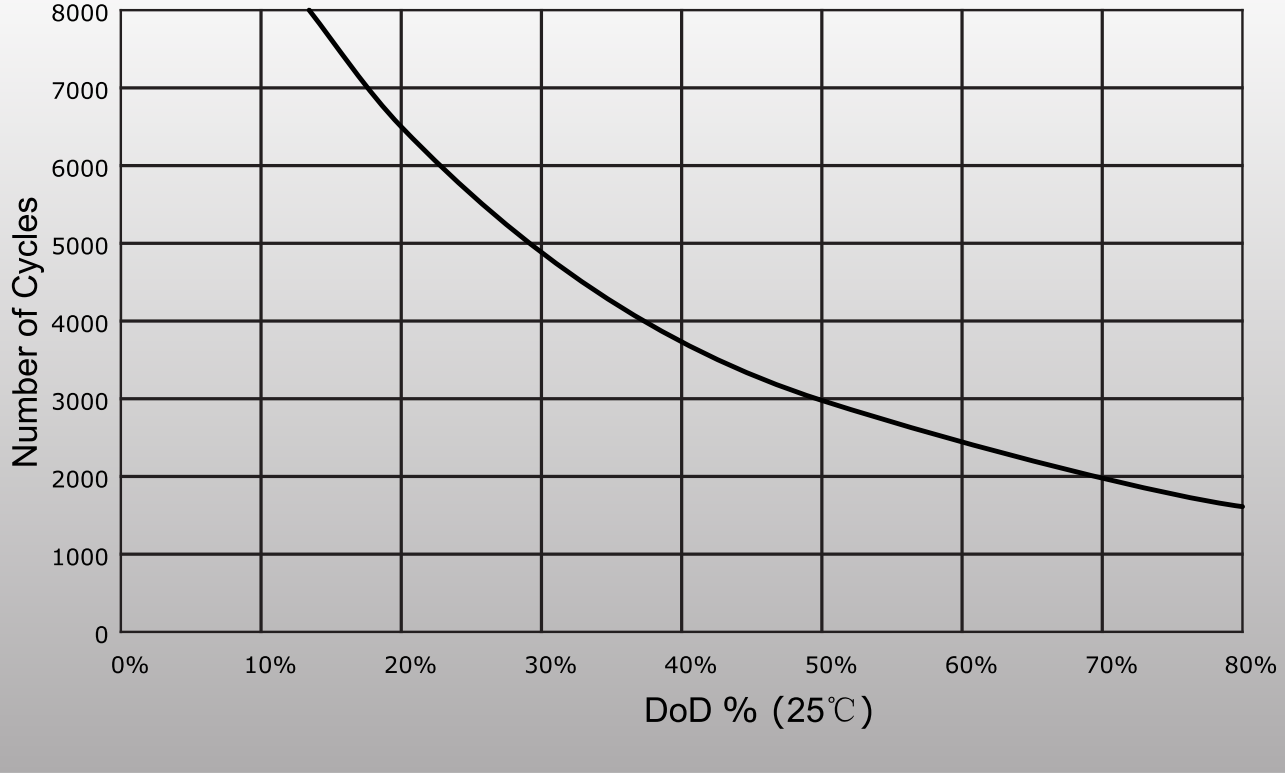
Charge voltage vs Ambient Temp. Curve



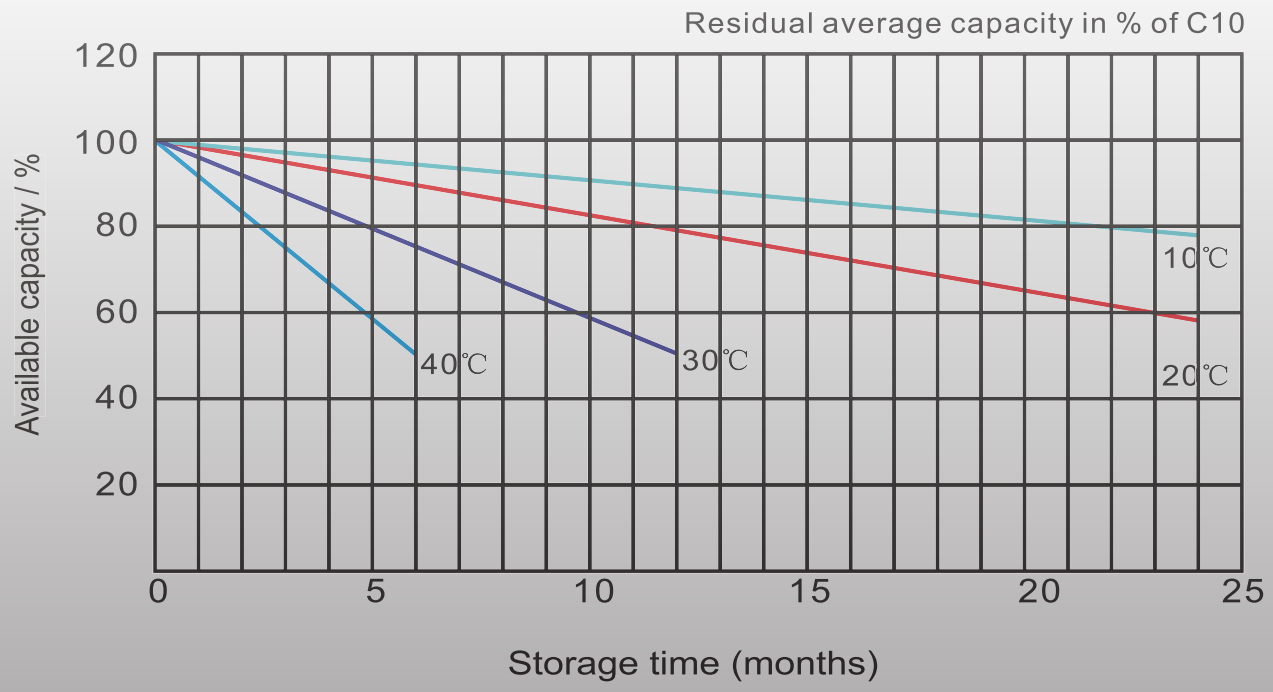
Temperature Effects in relation to Battery Capacity

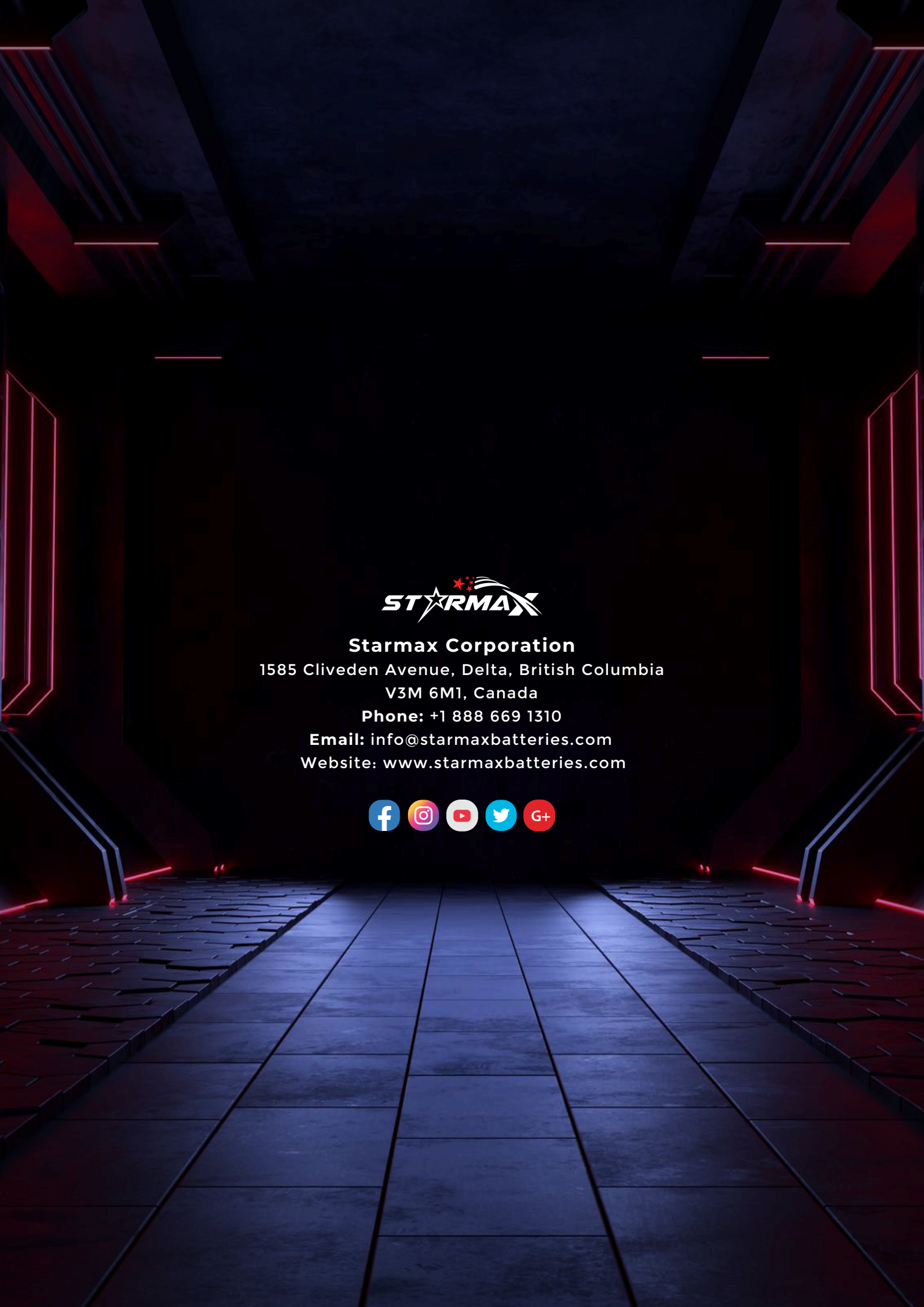


Cycle Life in Relation to DOD



General Relation of Capacity vs Storage Time





Starmax Corporation
1585 Cliveden Avenue, Delta, British Columbia
V3M 6M1, Canada
Phone: +1 888 669 1310
Email: info@starmaxbatteries.com
Website: www.starmaxbatteries.com