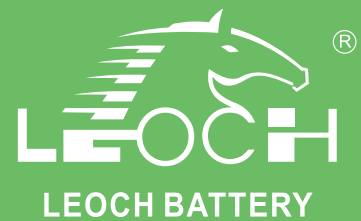




# Solar Series-Tubular Gel

## 6 OPzV420(2V546Ah)

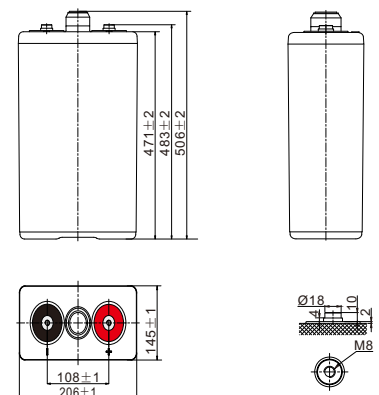


### Specifications

Rated Voltage	2V	
Nominal Capacity	546Ah	(C <sub>100</sub> , 1.80V/cell)
Dimension	Length	145mm(5.71 in.)
	Width	206mm(8.11 in.)
	Container Height	471mm(18.54 in.)
	Total Height	506mm(19.92 in.)
Approx Weight	34.5Kg (76.06 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	567.6Ah	(120hr, 4.73A, 1.80V/cell)
	546.0Ah	(100hr, 5.46A, 1.80V/cell)
	524.9Ah	(72hr, 7.29A, 1.80V/cell)
	420.0Ah	(10hr, 42.0A, 1.80V/cell)
Max. Discharge Current (5s)	3360A	
Internal Resistance(25°C)	Approx.0.80mΩ	
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°C (77±5°F)	
Max.Charging Current(25°C)	105.0A	
Charge voltage(25°C)	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	



### Layout



### 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	187.7	126.9	97.4	66.7	46.7	39.4	18.7	9.77	7.03	5.33	4.59
1.80V/cell	210.4	139.0	106.0	71.8	50.0	42.0	19.3	10.2	7.29	5.46	4.73
1.75V/cell	218.8	143.9	108.4	73.3	50.8	42.7	19.5	10.4	7.48	5.57	4.80
1.70V/cell	228.4	147.5	110.6	74.3	51.5	43.2	19.8	10.6	7.55	5.65	4.86
1.67V/cell	234.3	149.9	112.6	75.5	52.2	43.6	20.0	10.7	7.61	5.75	4.92
1.60V/cell	237.9	152.3	113.9	76.3	52.5	43.9	20.1	10.8	7.67	5.81	4.98

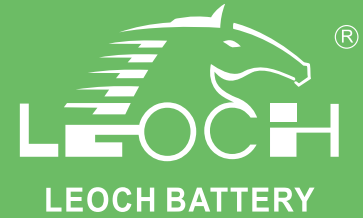
### Constant Power Discharge (Watts/cell) at 25 °C (77 °F)

F.V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	362.3	246.6	190.1	130.9	92.6	78.2	37.4	19.6	14.1	10.7	9.25
1.80V/cell	405.3	269.6	205.7	140.5	99.0	83.4	38.6	20.3	14.6	11.0	9.50
1.75V/cell	418.4	275.6	209.3	142.9	100.4	84.6	38.8	20.7	15.0	11.2	9.63
1.70V/cell	432.8	281.7	212.9	145.3	101.5	85.4	39.4	21.1	15.1	11.3	9.75
1.67V/cell	441.2	286.5	216.5	146.5	102.5	86.2	39.7	21.3	15.2	11.5	9.87
1.60V/cell	445.9	288.9	217.7	147.7	103.0	86.6	40.0	21.5	15.3	11.6	9.96



# Solar Series-Tubular Gel

## 6 OPzV420(2V546Ah)



### 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

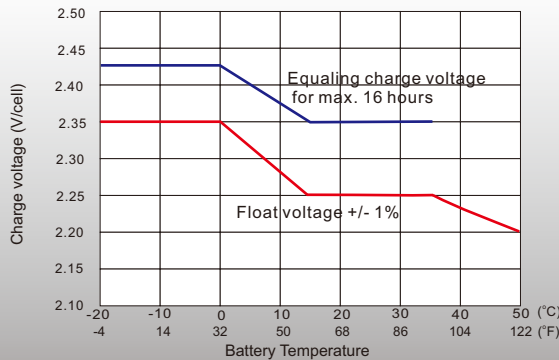
### General Features

- 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
- Built in copper core based in lead will carry large current
- Separator imported form AMER-SIL high porosity. PVC-SiO<sub>2</sub> and low resistance
- Pasted negative plate special grid design increase the active material. availability 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 ability and service life

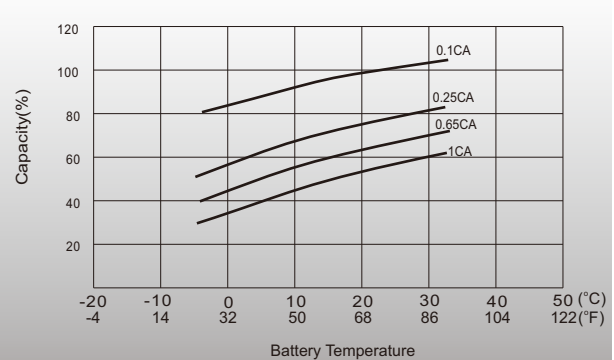
### Standards

- Compliance with IEC 60896, IEC 61427, DIN 40742 standards
- UL, CE Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001,ISO 9001 and ISO 14001 certified production facilities

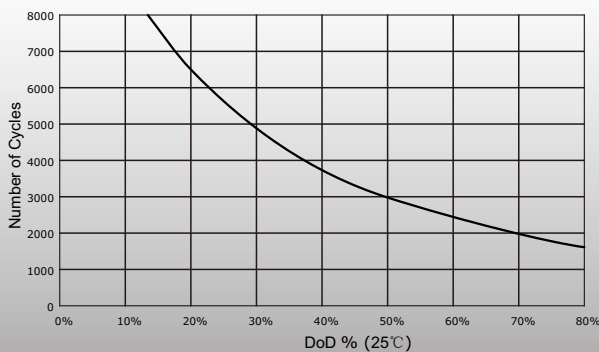
### Charge voltage vs ambient temperature curve



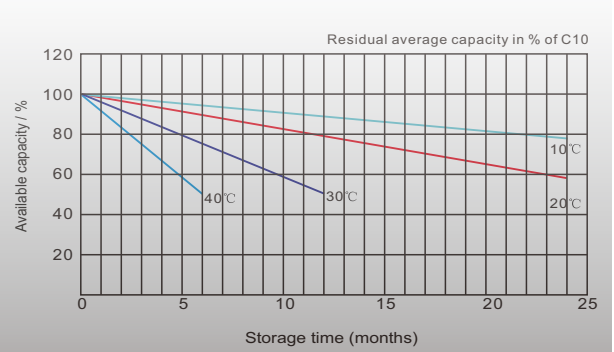
### Temperature effects in relation to battery capacity



### Cycle Life in Relation to DOD



### General Relation of Capacity VS. Storage Time



## Sales Offices Worldwide

#### China Sales Office

5th Floor, Xinhaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com

#### HongKong Sales Office

Workshop C, 33/F, TML Tower, No. 3 Hoi Shing Road,  
Tsuen Wan, New Territories, Hong Kong  
Tel: +852 35786666  
Fax: +44 1452 690125  
E-mail: sales.hk@leoch.com

#### Singapore Sales Office

No. 1 Tech Park Crescent,  
Singapore 638131  
Tel: +65 68636078  
Fax: +65 6863 6079  
Email: sales.sg@Leoch.com

#### Australia Sales Office

2 /29 Tarlington Place, Smithfield. NSW 2164  
Australia  
Tel: 02 9756 0950  
E-mail: sales.au@leoch.com

#### North America Sales Office

19751 Descartes  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us

#### UK Sales Office

9B Wheatstone Court. Waterwells, Business Park,  
Gloucester, GL2-2AQ, UK United Kingdom  
Tel: +44(0) 1452 729428 / 1452 729696  
Fax: +44 1452 690125  
E-mail: Sales.Europe@leoch.com

#### EMEA Sales Office

1 Deligiorgi St., 121 31 Athens,  
Greece  
Tel: +30 210 5760318 (2 lines)  
E-mail: support\_EMEA@leoch.com

#### India Sales Office

Shed no.A-53(b), 2nd Stage of Peenya Industrial Area,  
Bangalore North Taluk, Bangalore-560058, India  
Tel: +91-80-23440018/23440019  
Fax: +91-80-23440017  
E-mail: indiasales@leoch.com



[Http://www.leoch.com](http://www.leoch.com)

[Http://www.leoch.us](http://www.leoch.us)

© 2019 LEOCH. All rights reserved.

Trademarks and logos are the property of LEOCH and its affiliates unless otherwise noted.  
Subject to revisions without prior notice.

Publication No.:LB-6 OPzV420-C100-PD-EN-V1.2-202003