

OPG2-420 (2V420AH C10 @25°C)



Features

- § Tubular plates
- § DIN standard
- § ABS case, Flame Retardant V0 is available
- § Gel technology
- § Stable quality and high reliability
- § 25 years design life (at 25°C)

Application

- § Solar and Wind system
- § Alarm and security system
- § Telecommunication system
- § UPS
- § Emergency lighting
- § Auto control system
- § Electronic apparatus and equipment
- § Communication power supply
- § DC power supply

Specification

Nominal Voltage	2V (1 cells)	Operating Temp.Range	Maximum: -40~55°C (-40~131°F)	
Nominal Capacity	428AH (20hr, 1.80V/cell, 25°C/77°F)		Recommended: -15~50°C (5~122°F)	
	420AH (10hr, 1.80V/cell, 25°C/77°F)	Storage: -20~40°C (-4~104°F)		
	374AH (5hr, 1.75V/cell, 25°C/77°F)	Nominal Operating Temp.Range	25 ± 5°C	
	252AH (1hr, 1.60V/cell, 25°C/77°F)	Cycle Use	2.35~2.40V Temp.Coefficient -5mV/°C	
Dimension	Length	145 ± 2mm	Initial Charging Current Less Than 100A	
	Width	206 ± 2mm	2.23V Temp.Coefficient -3mV/°C	
	Container Height	471 ± 2mm	Standby Use	No limit on Initial Charging Current
	Total Height(with Terminal)	506 ± 2mm	Capacity affected by Temperature	40°C (104°F) 103%
Approx Weight	Approx 31.5Kg	Self Discharge	25°C (77°F) 100%	
Terminal	M8		0°C (32°F) 86%	
Container Material	ABS		OPG series batteries may be stored for up to 6 months	
Max. Discharge Current	2000A (5S)		At 25°C (77°F) and then a freshening charge is required	
Internal Resistance	Approx 0.55mΩ		For higher temperatures the time interval will be shorter	

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

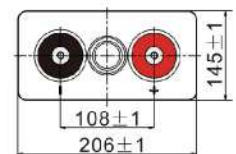
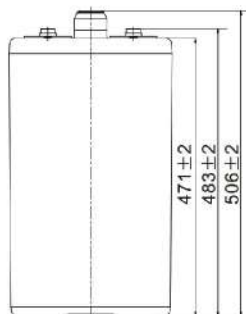
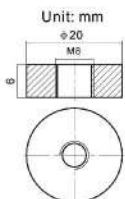
End voltage	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	100h
1.60V	437	343	249	156	112	89.4	75.9	66.7	53.8	44.1	22.6	19.6	10.73	5.99
1.65V	412	326	235	152	110	87.3	75.1	65.9	53.4	43.9	22.4	19.4	10.70	5.97
1.70V	389	312	231	148	108	86.9	74.0	64.9	52.8	43.7	22.2	19.3	10.54	5.84
1.75V	364	295	216	143	106	85.2	72.8	63.6	51.8	43.0	22.1	18.9	10.48	5.75
1.80V	339	277	206	139	104	83.2	71.1	62.0	50.5	42.0	21.4	18.5	10.29	5.56
1.85V	312	252	193	131	100	81.1	68.8	59.9	49.1	41.2	21.1	17.9	9.67	5.35
1.90V	266	212	162	116	89	74.8	64.0	55.3	44.5	37.0	18.9	16.5	9.06	4.94

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

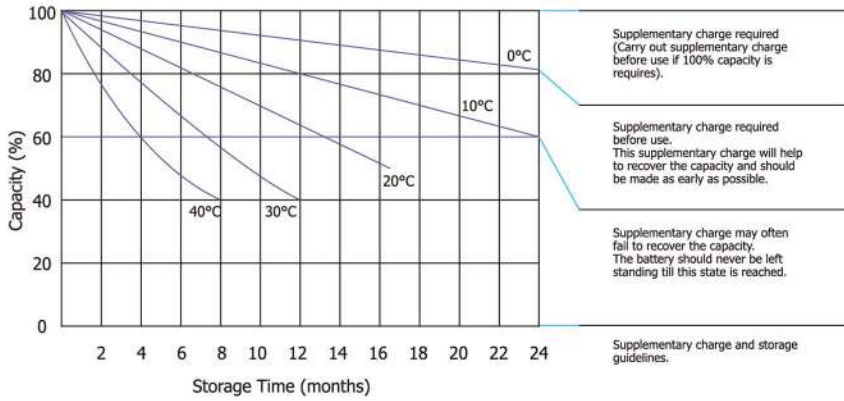
End voltage	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	100h
1.60V	753	603	455	291	212	169.4	144.1	127.0	102.9	84.4	43.3	38.9	21.38	11.95
1.65V	719	572	428	285	209	166.1	142.8	125.8	102.3	84.2	43.1	38.7	21.34	11.90
1.70V	680	549	422	279	206	165.7	141.4	124.1	101.5	84.0	43.0	38.5	21.11	11.68
1.75V	642	526	403	272	203	163.2	139.5	122.2	99.8	83.2	42.8	37.9	20.99	11.52
1.80V	607	505	387	266	200	159.9	136.8	119.3	97.5	80.9	41.7	37.2	20.69	11.17
1.85V	563	466	368	252	193	157.4	133.9	116.6	95.6	80.5	41.3	36.4	19.67	10.88
1.90V	486	397	312	226	175	146.6	125.6	108.5	87.3	72.8	37.5	34.2	18.79	10.25

Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

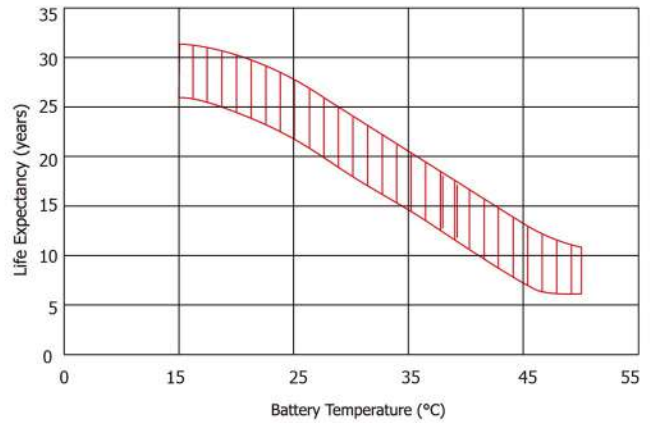
Dimension



Storage Characteristics Curve

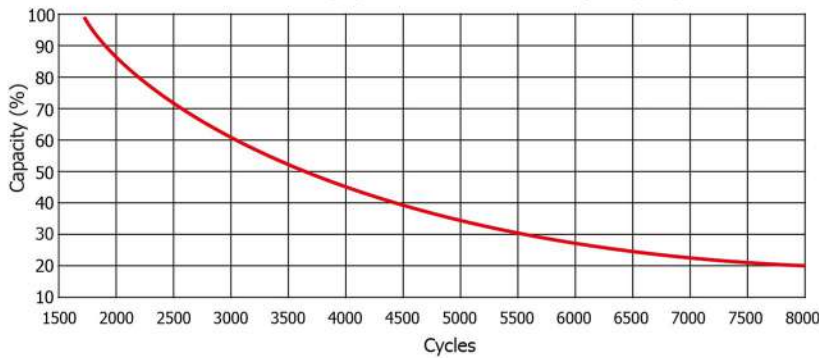


Effect Of Temperature On Float Life

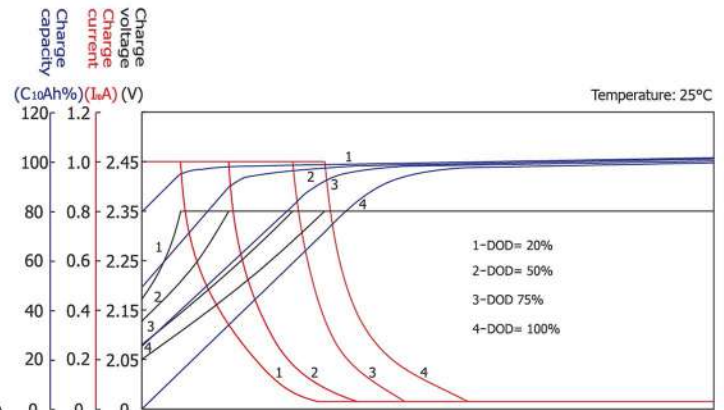


Cycle Life With Depth Of Discharge (D.O.D.)

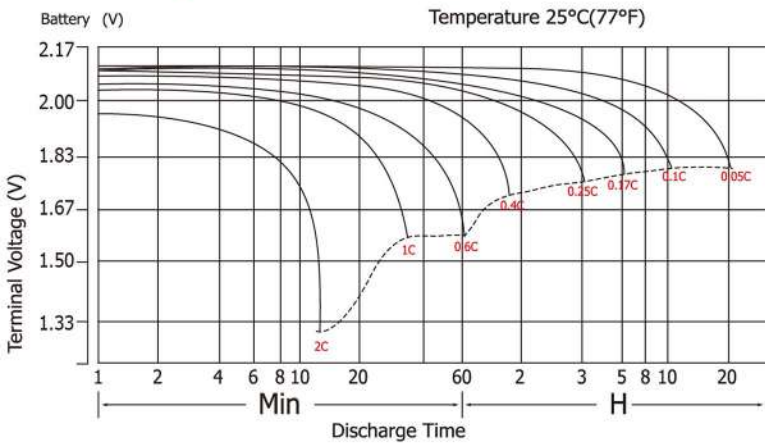
Testing condition: Acc. to IEC 60896 (25°C-30°C)
 Discharging: current 0.17C (FV 1.7V/cell);
 Charging: current 0.25C max, voltage 2.45V/cell;
 Charging volume: 125% of discharged capacity.



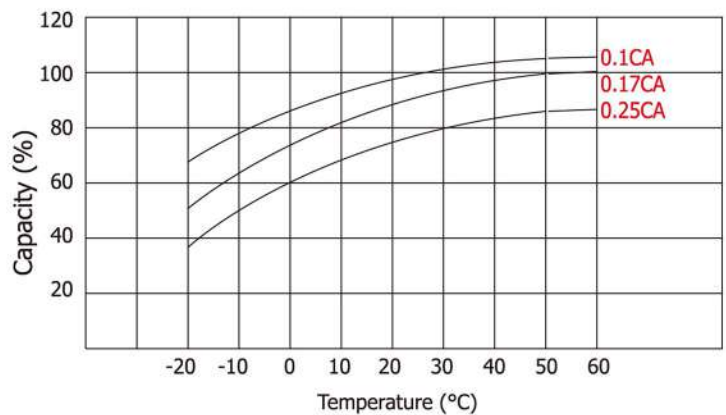
Charge Characteristics Curve For Standby Use



Discharge Characteristics Curve



Temperature Effects With Capacity



Certificates

