

### Specification

Nominal Voltage	2V	
Capacity(10HR)	490.0AH (1.8V/cell,20 °C)	
Dimension	Length	166 ± 2mm (6.54 inches)
	Width	206 ± 3mm (8.11 inches)
	Container Height	471 ± 3mm (18.5 inches)
	Total Height (with Terminal)	526 ± 3mm (20.7 inches)
Approx Weight	Without Electrolyte	28 kg (61.73lbs)
	With Electrolyte	39 kg (85.98lbs)
Container Material	SAN transparent container	
Rated Capacity	490.0 AH/49.0A	(10hr, 1.80V/cell, 20 °C/68 °F)
	435 AH/87.0A	(5hr, 1.75V/cell, 20 °C/68 °F)
	377.7 AH/125.9A	(3hr, 1.75V/cell, 20 °C/68 °F)
	279.8 AH/279.8A	(1hr, 1.60V/cell, 20 °C/68 °F)
Max. Discharge Current	3920A (5s)	
Internal Resistance	Approx 0.5m Ω	
Operating Temp.Range	Discharge	-15 ~ 55 °C (5 ~ 131 °F)
	Charge	0 ~ 45 °C (32 ~ 113 °F)
	Storage	-15 ~ 45 °C (5 ~ 113 °F)
Type and number of poles	M8/2	
Charging	Floating voltage:	2.23V~2.25V at 20 °C(68 °F)Temp.
	Boost charge:	2.30V~2.40V at 20 °C(68 °F)Temp.
	Charging current(max.):	0.1CA
	Temp.Coefficient	-3mV/ °C
Capacity affected by Temperature	40 °C (104 °F)	103%
	25 °C ( 77 °F)	100%
	0 °C ( 32 °F)	86%
Self Discharge(4% per month)	CBB OPzS batteries may be stored for up to 6 months at 20 °C(68 °F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ *Telecommunications.*
- ◆ *Radio and cellular telephone relay stations.*
- ◆ *Emergency lighting systems.*
- ◆ *Power stations, Conventional power stations,*
- ◆ *Alternative power (solar; wind).*
- ◆ *Large UPS and computer back-up.*
- ◆ *Railway signalling.*
- ◆ *Maritime standby power on ships and ashore.*
- ◆ *Standby power.*
- ◆ *Buoy lighting.*
- ◆ *Long service life, designed life 15-20 years.*

### Constant Current Discharge (Amperes) at 20°C (68 °F)

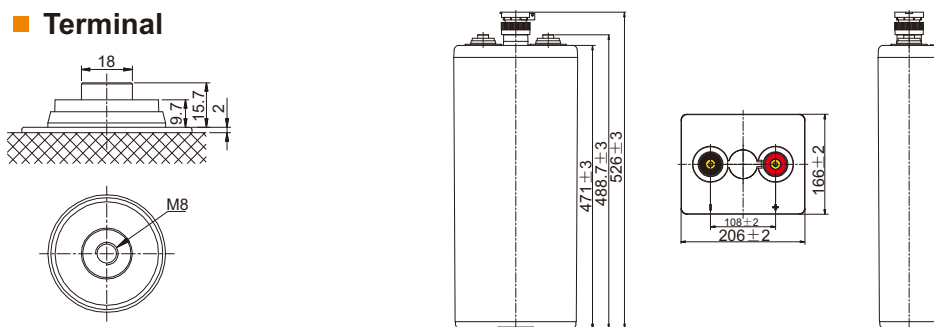
F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60 V/cell	371.4	322.7	279.8	220.5	182.3	136.2	109.5	92.6	80.2	63.4	52.4	28.4
1.65V/cell	348.9	310.3	270.5	214.9	178.1	133.9	107.9	91.4	79.1	62.7	51.8	28.2
1.70V/cell	331.2	292.7	260.2	208.1	174.0	130.0	105.5	89.4	77.6	61.6	50.9	27.8
1.75V/cell	310.7	279.0	247.0	198.3	166.6	125.9	102.3	87.0	75.7	60.5	50.1	27.3
1.80V/cell	276.4	251.5	227.4	185.9	156.6	119.6	97.9	83.4	72.9	58.9	49.0	26.8
1.85V/cell	220.5	208.4	194.5	165.3	142.1	109.4	90.6	78.2	68.7	56.0	46.9	25.8

### Constant Power Discharge (Watts) at 20°C (68 °F)

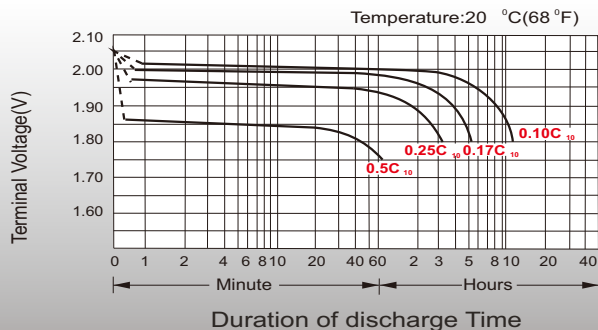
F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60 V/cell	634.0	564.8	496.8	396.4	331.5	249.5	202.3	172.3	150.1	119.3	98.9	53.9
1.65V/cell	608.5	549.5	484.2	388.4	325.5	246.5	200.4	170.9	148.8	118.4	98.3	53.6
1.70V/cell	585.6	523.7	469.3	378.4	319.3	240.5	196.5	167.8	146.5	116.8	97.0	53.1
1.75V/cell	558.5	504.5	449.7	363.2	308.0	234.4	191.5	164.1	143.4	115.3	95.8	52.4
1.80V/cell	503.6	461.8	419.3	344.4	292.0	224.2	184.5	158.1	139.0	112.7	94.2	51.7
1.85V/cell	408.6	388.2	364.0	310.5	268.0	207.4	172.4	149.5	131.9	108.0	90.9	50.1

## Dimensions

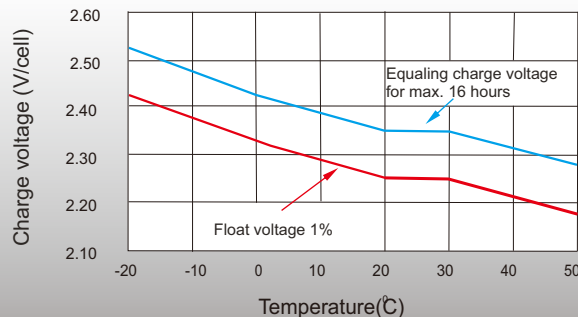
### Terminal



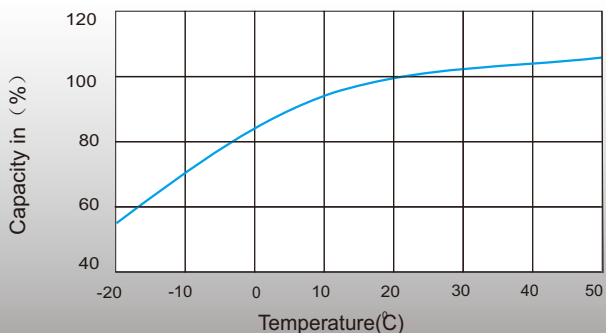
### Discharge Characteristics



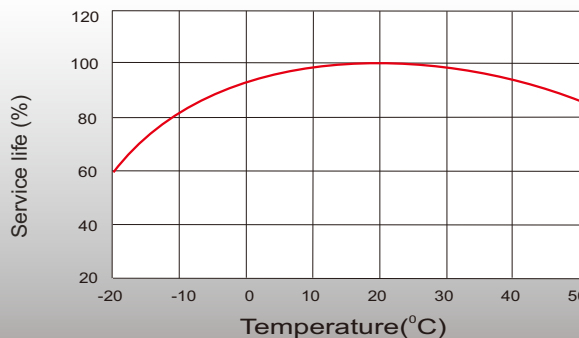
### Charge voltage Vs ambient temperature curve



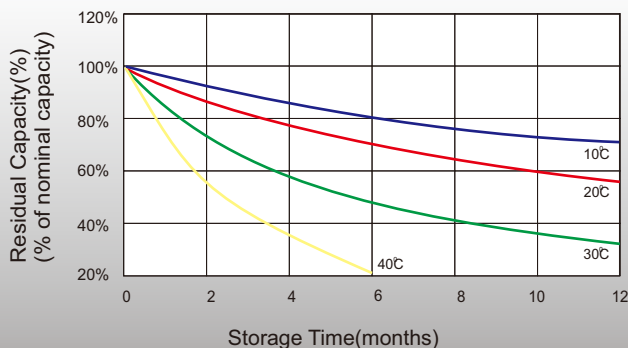
### Discharge capacity Vs Ambient temperature curve (I10A)



### Relation curves of service life and ambient temperature



### Self Discharge Characteristics



- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
  1. Charged for above 3 days at limited current 0.1CA and constant voltage 2.25V/cell.
  2. Charged for above 20 hours at limited current 0.1CA and constant voltage 2.45V/cell.
  3. Charged for 8~10 hours at limited current 0.05CA .
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.