

# CZS150-2

2V 150AH

OPzS



## CZS150-2



## Physical Specification

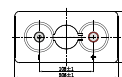
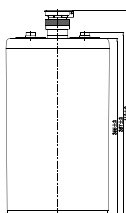
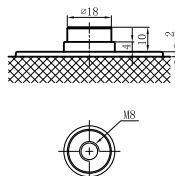
Part Number	<b>CZS150-2</b>
Length	<b>103 ± 2 mm</b>
Width	<b>206 ± 2 mm</b>
Container Height	<b>355 ± 2 mm</b>
Total Height (with terminal)	<b>410 ± 2 mm</b>
Approx Weight without / with Electrolyte	<b>10.8kg / 15.3kg</b>

## Specifications

	Nominal Voltage	2V
	Nominal Capacity (10HR)	156.0AH
<b>Terminal Type</b>	Standard Terminal	-
	Optional Terminal	-
<b>Container Material</b>	Standard Option	-
<b>Rated Capacity</b>	(100 hr, 1.80V/cell, 20°C)	184.5 AH/184.5A
	(10 hr, 1.80V/cell, 20°C)	156.0 AH/15.6A
	(5 hr, 1.75V/cell, 20°C)	143.0 AH/28.6A
	(3 hr, 1.75V/cell, 20°C)	124.8 AH/41.6A
<b>Max Discharge Current</b>	1200A (5s)	
<b>Internal Resistance</b>	Approx 1.1mΩ	
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -15 ~ 50°C Charge: 0 ~ 40°C Storage: -15 ~ 40°C
	Type and number of poles	F8/2
	Charging	Floating voltage: 2.23V~2.25V at 20°C Temp. Boost charge: 2.30V~2.40V at 20°C Temp. Charging current(max.): 0.1CA Temp.Coefficient -3mV/°C
	Capacity affected by Temperature	40°C 103% 25°C 100% 0°C 86%
<b>Design Floating Life at 20°C</b>	20 Years	
<b>Self Discharge</b>	Canbat CZS batteries may be stored for up to 6 months at 25°C and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

## Dimensions

### Terminal



ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE

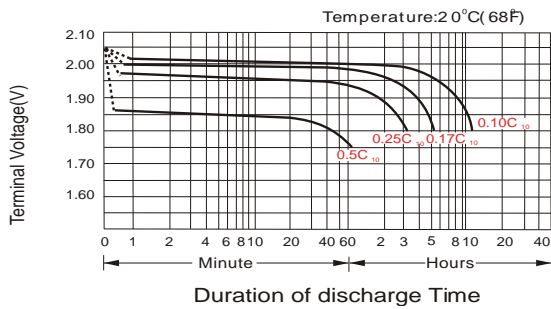
### Constant Current Discharge (Amperes) at 20°C

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	163.8	129.8	106.1	77.6	61.9	44.7	35.7	30.2	26.1	20.6	17.0	9.2
1.65V/cell	152.4	122.2	101.0	75.0	59.8	43.7	35.3	29.9	25.7	20.3	16.7	9.0
1.70V/cell	142.2	116.0	95.3	72.0	58.2	42.6	34.7	29.4	25.5	20.0	16.4	8.9
1.75V/cell	129.6	107.0	89.0	68.7	56.0	41.6	33.8	28.6	24.9	19.7	16.0	8.8
1.80V/cell	109.1	93.6	80.3	63.1	52.0	39.5	32.4	27.7	24.1	19.4	15.6	8.7
1.85V/cell	87.2	77.9	69.0	56.0	46.8	36.6	30.5	26.3	23.0	18.5	15.2	8.4

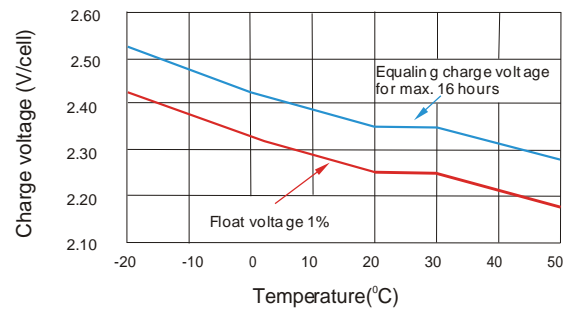
### Constant Power Discharge (Watts) at 20°C

F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	279.6	227.2	188.3	139.5	112.5	81.9	66.0	56.3	48.8	38.8	32.1	17.4
1.65V/cell	265.8	216.4	180.8	135.5	109.3	80.3	65.5	55.8	48.4	38.3	31.7	17.2
1.70V/cell	251.4	207.5	171.8	131.0	106.8	78.8	64.7	55.1	48.1	38.0	31.2	17.0
1.75V/cell	233.0	193.5	161.9	125.9	103.6	77.4	63.2	54.0	47.2	37.5	30.6	16.7
1.80V/cell	198.7	171.8	148.1	116.9	97.0	74.0	61.1	52.4	46.0	37.1	30.0	16.6
1.85V/cell	161.6	145.1	129.2	105.2	88.3	69.4	58.0	50.3	44.2	35.6	29.4	16.4

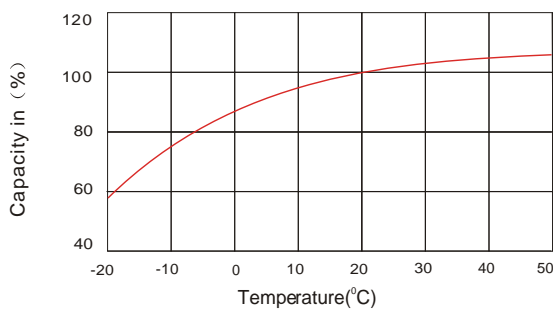
### Discharge Characteristics



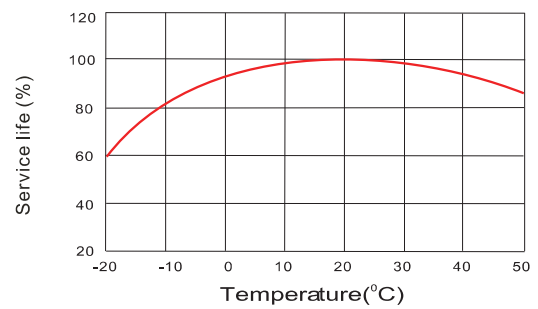
### Charge voltage Vs ambient temperature curve



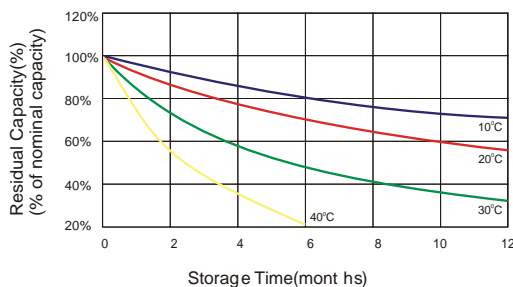
### Discharge capacity Vs Ambient temperature curve (I10A)



### Relation curves of service life and ambient temperature



### Self Discharge Characteristics



No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)

Supplementary charge required before use. Optional charging way:  
 1. Charged for above 3 days at current 0.1C A and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at current 0.1C A and constant voltage 2.45V/cell.  
 3. Charged for 8-10 hours at limited current 0.05CA .

Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.