

# YALÇIN GOLD BATTERY

## 2 OPzS 100 (2V100AH)

### Specification

Nominal Voltage	2V	
Capacity(10HR)	100.0AH (1.8V/cell,20 °C)	
Dimension	Length	103±2mm (4.06 inches)
	Width	206±3mm (8.11 inches)
	Container Height	355±3mm (13.98 inches)
	Total Height (with Terminal)	410±3mm (16.14 inches)
Approx Weight	Without Electrolyte	8.1 kg (17.86lbs)
	With Electrolyte	13.2 kg (29.11lbs)
Container Material	SAN transparent container	
Rated Capacity	100.0 AH/10.0A	(10hr, 1.80V/cell, 20°C/68°F)
	89.0 AH/17.8A	(5hr, 1.75V/cell, 20°C/68°F)
	77.1 AH/25.7A	(3hr, 1.75V/cell, 20°C/68°F)
	57.1 AH/57.1A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	800A (5s)	
Internal Resistance	Approx 1.5mΩ	
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)	Gold 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 (solawind).
- ◆ 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	30mi n	45mi n	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	75.8	65.9	57.1	45.0	37.2	27.8	22.4	18.9	16.4	12.9	10.7	5.80
1.65V/cell	71.2	63.3	55.2	43.9	36.4	27.3	22.0	18.6	16.1	12.8	10.6	5.75
1.70V/cell	67.6	59.7	53.1	42.5	35.5	26.5	21.5	18.2	15.8	12.6	10.4	5.67
1.75V/cell	63.4	56.9	50.4	40.5	34.0	25.7	20.9	17.8	15.5	12.4	10.2	5.57
1.80V/cell	56.4	51.3	46.4	37.9	32.0	24.4	20.0	17.0	14.9	12.0	10.0	5.47
1.85V/cell	45.0	42.5	39.7	33.7	29.0	22.3	18.5	16.0	14.0	11.4	9.57	5.26

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

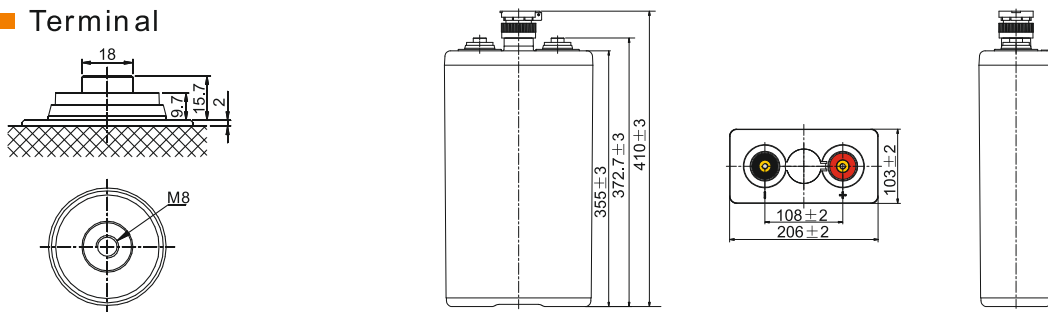
F.V/Time	30mi n	45mi n	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	129.4	115.3	101.4	80.9	67.6	50.9	41.3	35.2	30.6	24.3	20.2	11.0
1.65V/cell	124.2	112.1	98.8	79.3	66.4	50.3	40.9	34.9	30.4	24.2	20.1	10.9
1.70V/cell	119.5	106.9	95.8	77.2	65.2	49.1	40.1	34.2	29.9	23.8	19.8	10.8
1.75V/cell	114.0	103.0	91.8	74.1	62.9	47.8	39.1	33.5	29.3	23.5	19.6	10.7
1.80V/cell	102.8	94.2	85.6	70.3	59.6	45.8	37.6	32.3	28.4	23.0	19.2	10.6
1.85V/cell	83.4	79.2	74.3	63.4	54.7	42.3	35.2	30.5	26.9	22.0	18.6	10.2

Specifications subject to change without notice.

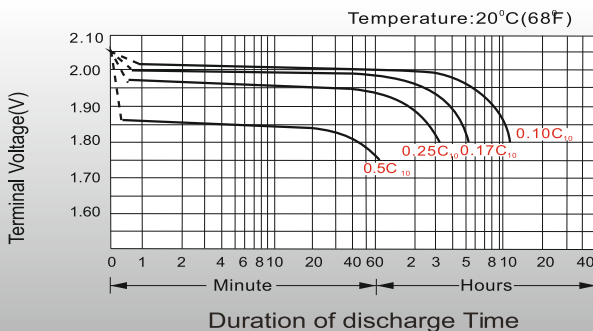


# Dimensions

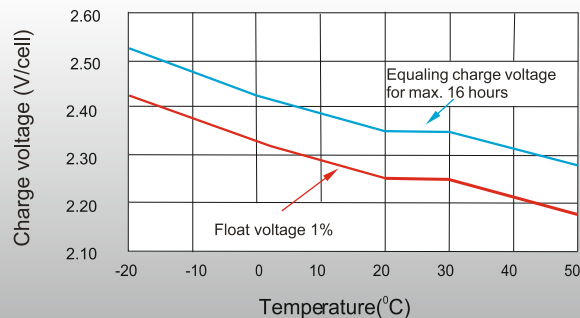
## Terminal



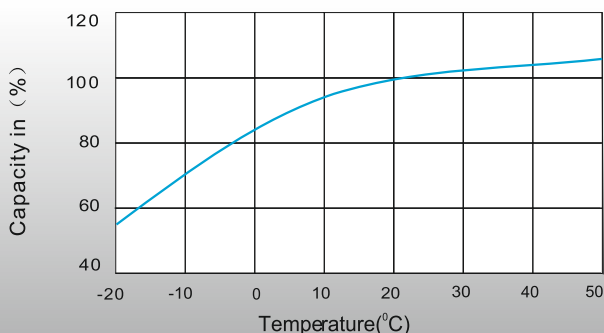
## Discharge Characteristics



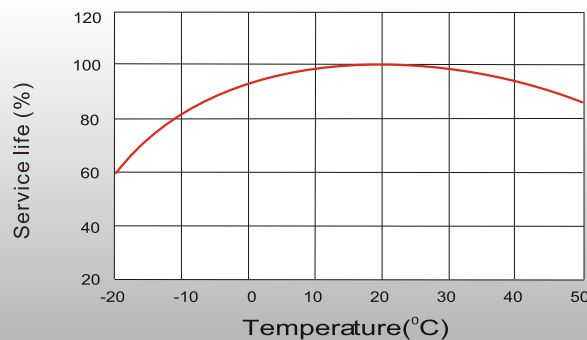
## Charge voltage Vs ambient temperature curve



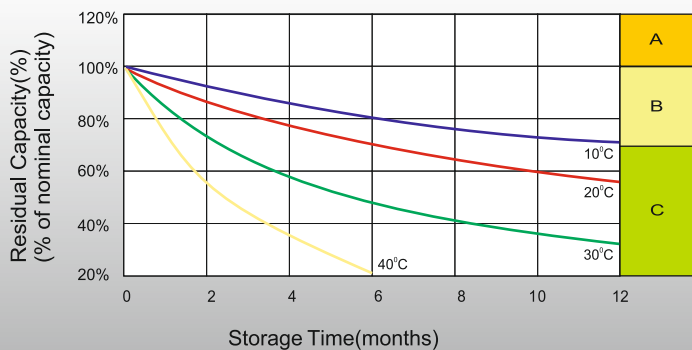
## Discharge capacity Vs Ambient temperature curve (1I0A)



## 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. Charge for above 3 days at limited current 0.1CA and constant voltage 2.25V/cell.
  2. Charge for above 20 hours at limited current 0.1CA and constant voltage 2.45V/cell.
  3. Charge 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.

### Merkez

100. Yil Bulvarı 1232. Sokak  
(Eski 40. Sokak) No: 65  
Ostim / ANKARA

### Tel&Fax

T. (0.312) 354 16 45  
(0.312) 385 55 60  
F. (0.312) 354 07 97

### Servis

100. Yil Bulvarı 1234. Sokak  
(Eski 57. Sokak) No: 91  
Ostim / ANKARA

### Fabrika

Kırıkkale OSB Kızılırmak Caddesi  
4. Sokak No: 6  
Yahşihan / KIRIKKALE