

# YALÇIN GOLD BATTERY

## 6 OPzS 420 (2V420AH)

### Specification

Nominal Voltage	2V	
Capacity(10HR)	420.0AH (1.8V/cell,20 °C)	
Dimension	Length	145±2mm (5.71 inches)
	Width	206±3mm (8.11 inches)
	Container Height	471±3mm (18.5 inches)
	Total Height (with Terminal)	526±3mm (20.7 inches)
	Without Electrolyte	24.5 kg (54.0lbs)
Approx Weight	With Electrolyte 32.7 kg (72.1lbs)	
Container Material	SAN transparent container	
Rated Capacity	420.0 AH/42.0A	(10hr, 1.80V/cell,20°C/68°F)
	373.0 AH/74.6A	(5hr, 1.75V/cell,20°C/68°F)
	323.7 AH/107.9A	(3hr, 1.75V/cell,20°C/68°F)
	239.8 AH/239.8A	(1hr, 1.60V/cell,20°C/68°F)
Max. Discharge Current	3360A (5s)	
Internal Resistance	Approx 0.58mΩ	
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	318.4	276.6	239.8	189.0	156.2	116.8	93.9	79.4	68.7	54.4	44.9	24.4
1.65V/cell	299.0	266.0	231.8	184.2	152.7	114.8	92.5	78.3	67.8	53.7	44.4	24.1
1.70V/cell	283.9	250.9	223.0	178.4	149.1	111.4	90.4	76.6	66.5	52.8	43.7	23.8
1.75V/cell	266.3	239.1	211.7	170.0	142.8	107.9	87.7	74.6	64.9	51.9	42.9	23.4
1.80V/cell	236.9	215.6	194.9	159.3	134.2	102.5	83.9	71.5	62.5	50.5	42.0	23.0
1.85V/cell	189.0	178.6	166.7	141.7	121.8	93.8	77.7	67.0	58.9	48.0	40.2	22.1

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

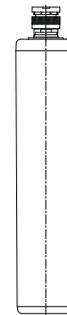
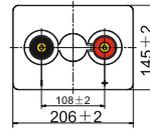
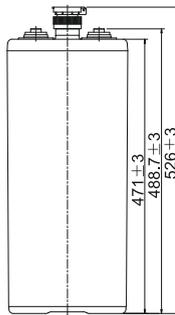
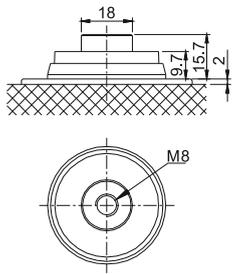
F.V/Time	30mi n	45mi n	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	543.4	484.1	425.8	339.8	284.1	213.8	173.4	147.7	128.7	102.2	84.8	46.2
1.65V/cell	521.6	471.0	415.0	332.9	279.0	211.3	171.8	146.4	127.5	101.5	84.2	46.0
1.70V/cell	502.0	448.9	402.3	324.4	273.7	206.1	168.4	143.8	125.5	100.1	83.1	45.5
1.75V/cell	478.7	432.4	385.4	311.3	264.0	200.9	164.2	140.7	122.9	98.8	82.1	44.9
1.80V/cell	431.6	395.8	359.4	295.2	250.3	192.2	158.1	135.5	119.1	96.6	80.8	44.3
1.85V/cell	350.2	332.7	312.0	266.1	229.7	177.8	147.8	128.1	113.1	92.5	77.9	43.0

Specifications subject to change without notice.

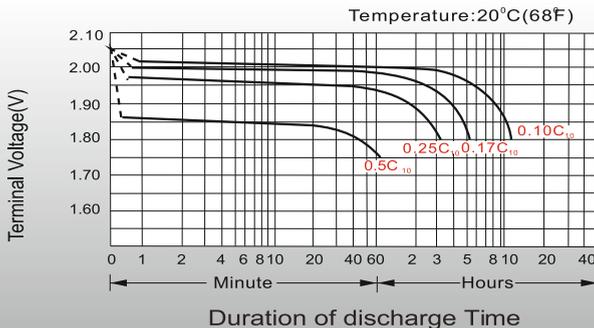


## Dimensions

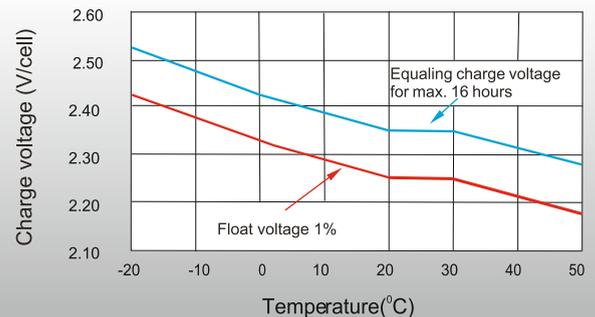
### Terminal



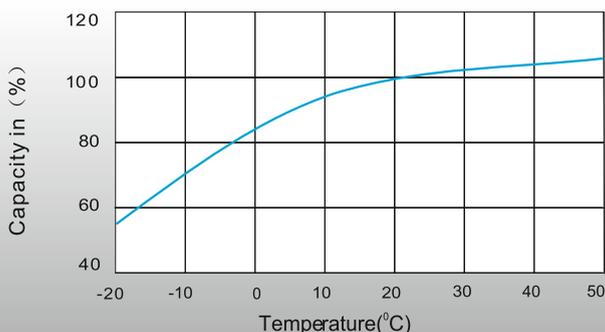
## Discharge Characteristics



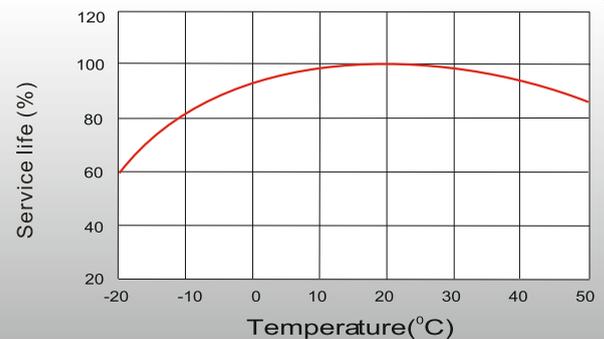
## Charge voltage Vs ambient temperature curve



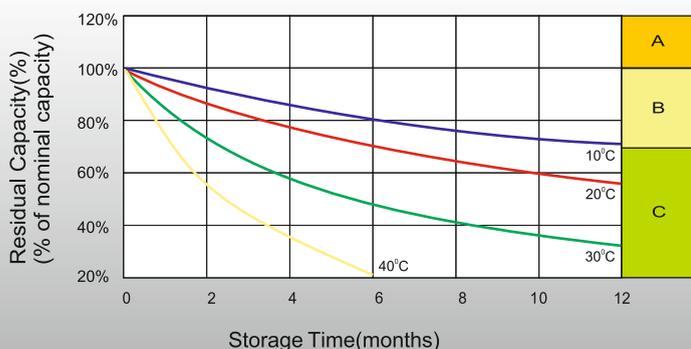
## Discharge capacity Vs Ambient temperature curve (I10A)



## 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. Optimal 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. Yıl 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. Yıl Bulvarı 1234. Sokak  
(Eski 57. Sokak) No: 91  
Ostim / ANKARA



Fabrika

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