

# YALÇIN GOLD BATTERY

## 7 OPzS 490 (2V490AH)

### 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)
	Without Electrolyte	28.2 kg (62.0lbs)
Approx Weight	With Electrolyte	38.0 kg (83.8lbs)
	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 0.5mΩ	
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 (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
1.60V/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)

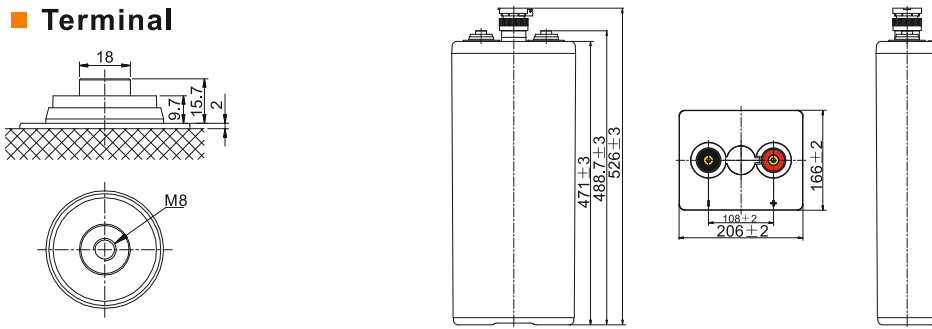
F.V/Time	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V/cell	634.0	564.8	496.8	396.4	331.5	249.5	202.3	172.3	150.1	119.3	98.9	53.9
1.65V/cell	608.5	549.5	484.2	388.4	325.5	246.5	200.4	170.9	148.8	118.4	98.3	53.6
1.70V/cell	585.6	523.7	469.3	378.4	319.3	240.5	196.5	167.8	146.5	116.8	97.0	53.1
1.75V/cell	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

Specifications subject to change without notice.

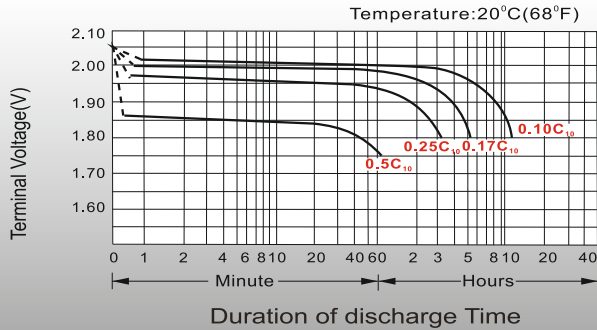


## Dimensions

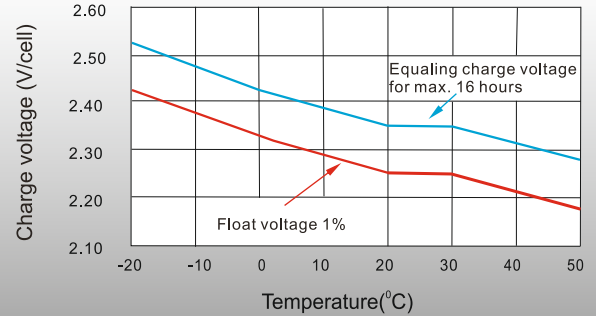
### Terminal



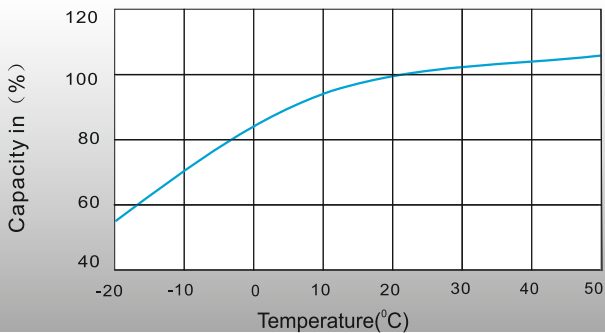
### Discharge Characteristics



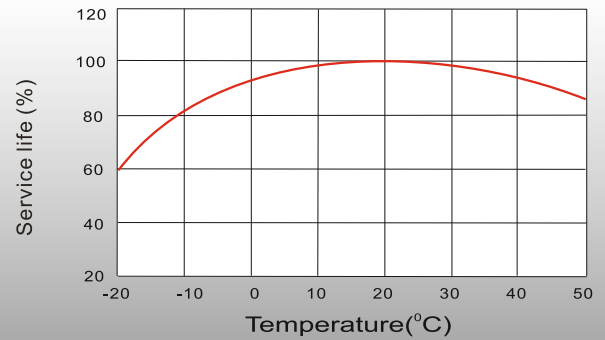
### Charge voltage Vs ambient temperature curve



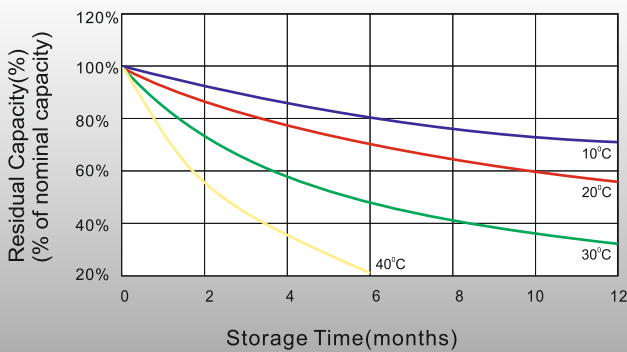
### Discharge capacity Vs Ambient temperature curve (I10A)



### 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. 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 01CA 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

**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