



# OBS12490HR (12V 490W)

## High Rate VRLA Battery

OSONIX High Rate VRLA has High-Density AGM technology, Manufactured from high purity lead (99.99%), its advanced lead tin calcium alloy reduces grid corrosion and promotes long battery life for up to 12 years.

### > Features

- Absorbed Glass Mat technology (AGM) for greater than 99.99% recombination efficiency
- Special designed thin grids for optimized high power density
- Oversized partition intercell welds, providing low resistance connections & minimal power loss
- Compliance with IATA/ICAO Special Provisions Compliance A67 (No restrictions for rail, road, sea & air transport)
- Superior performance at high rates of discharge & recharge

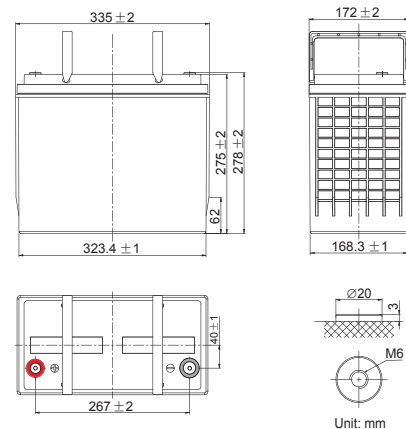
### > Applications

- Uninterruptible power supply (UPS)
- Hospitals & Testing Laboratories
- Telecommunications
- Data Centers
- Banks & Financial Centers
- Power Generation Plants
- High Power Backup Supply



SPECIFICATIONS		Standard @ 25°C (77°F)
Nominal Voltage		12 V
Nominal Rate (15 min to 1.67 V/cell)		490.9 W/cell
Nominal Capacity (20 hrs. to 1.80 V/cell)		142 Ah
Rated capacity	145.2 Ah	(20hrs, 7.26A, 1.75V/cell)
	134.4 Ah	(8hrs, 16.8A, 1.75V/cell)
	114.0 Ah	(3hrs, 38.0A, 1.75V/cell)
	99.4 Ah	(1hr, 99.4A, 1.67V/cell)
Max. Discharge Current		1846 A
Internal Resistance		3.8 mΩ
Operating Temp. Range	Discharge	-15 to 50 °C (5 to 122 °F)
	Charge	0 to 40 °C (32 to 104 °F)
	Storage	-15 to 40 °C (5 to 104 °F)
Nominal Operating Temp. Range		25 ±3 °C (77 ±5 °F)
Short Circuit Current		2640 A
Max. Charging Current		42.0 A
Charge voltage	Float	13.5 V
	Temp. Coefficient	-3 mV / cell / °C
	Equalization	14.1 to 14.4 V
Self Discharge		≤3% /month

PHYSICAL SPECIFICATION		
Dimension	Lenght	335 ±2 mm (13.2 in)
	Width	172 ±2 mm (6.77 in)
	Height	275 ±2 mm (10.8 in)
	Total Height	278 ±2 mm (10.9 in)
Weight		42.0 Kg (92.6 lb)
Terminal		M6
Container Mat. (Flame retardant)		ABS UL94 HB (Optional V0)
Recommended Torque		4 Nm (35.40 in-lb)
Maximum allowable torque		5.4 Nm (47.79 in-lb)



Compliance with:  
IEC 60896 standard  
CE, UL 1989, UL94 HB  
IATF16949, OHSAS 18001, ISO 9001, ISO 14001 certified production



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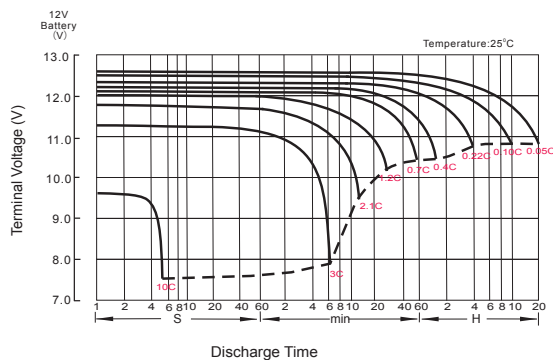
## CONSTANT CURRENT DISCHARGE (AMPERES) AT 25°C (77°F)

Final V. / Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	261.7	220.7	194.8	168.9	134.5	103.1	82.1	48.4	35.1	28.0	23.4	20.2	16.0	13.3	6.93
1.80V/cell	310.5	248.5	216.5	183.6	144.4	109.9	87.2	50.6	36.7	28.9	24.1	20.8	16.4	13.6	7.10
1.75V/cell	355.0	282.6	237.2	196.8	152.2	115.5	91.7	52.5	38.0	29.9	24.8	21.4	16.8	13.8	7.26
1.70V/cell	391.7	303.6	253.1	208.7	159.8	120.9	95.6	54.7	38.9	30.5	25.4	21.8	17.1	14.0	7.38
1.67V/cell	426.0	326.6	270.7	220.4	168.3	126.5	99.4	56.6	40.1	31.4	25.9	22.2	17.4	14.2	7.51
1.60V/cell	463.5	354.8	287.3	232.3	176.4	131.3	103.0	58.1	41.1	32.1	26.6	22.7	17.7	14.5	7.63

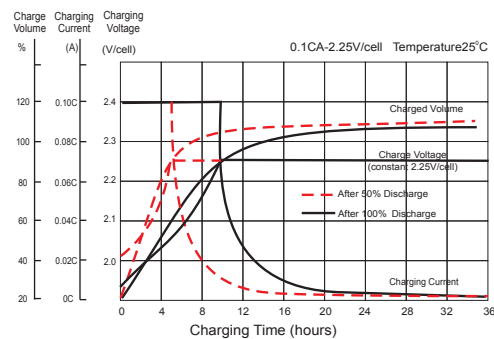
## CONSTANT POWER DISCHARGE (WATTS/CELL) AT 25°C (77°F)

Final V. / Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	497.8	424.6	377.4	329.0	263.7	203.4	162.9	96.6	70.3	56.2	47.3	41.1	32.7	27.3	14.3
1.80V/cell	583.6	474.1	415.6	355.1	280.9	215.0	171.7	100.2	72.9	57.7	48.3	41.8	33.3	27.7	14.6
1.75V/cell	661.2	532.2	451.5	377.7	293.7	224.2	179.2	103.3	75.0	59.3	49.5	42.9	33.9	28.0	14.8
1.70V/cell	722.4	566.4	476.7	397.6	306.2	233.0	185.4	106.7	76.5	60.3	50.4	43.4	34.3	28.3	15.0
1.67V/cell	777.5	602.9	490.9	416.4	320.5	242.5	191.8	109.9	78.2	61.7	51.1	44.1	34.6	28.6	15.2
1.60V/cell	829.6	641.4	507.2	429.8	329.2	247.0	195.1	110.8	78.8	61.9	51.5	44.3	34.6	28.5	15.2

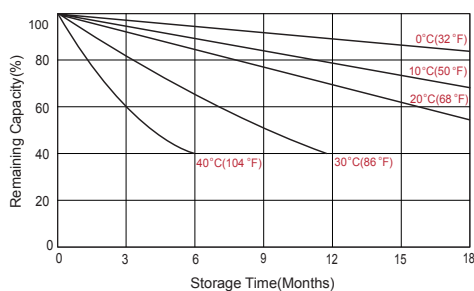
### Discharge Characteristics



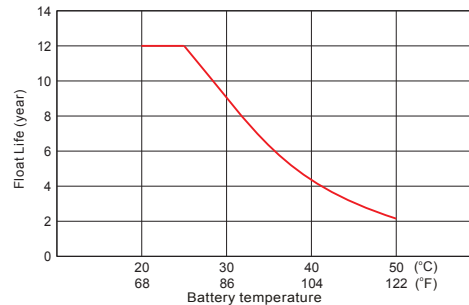
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Temperature Effects on Long Term Float Life



\* Product specifications are subject to change without notice.  
\* US-V2007-REV3.04