



OBS12540HR (12V 540W)

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 intercells 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

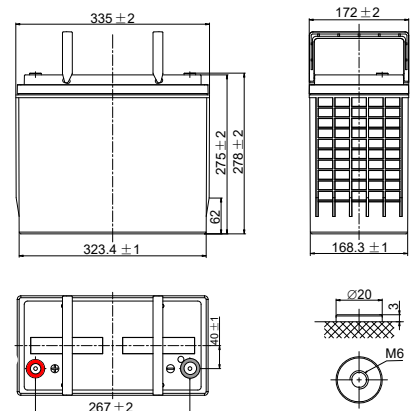
► Applications

- 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)		540.1 W/cell
Nominal Capacity (20 hrs. to 1.80 V/cell)		146 Ah
Rated capacity	151.4 Ah	(20hrs, 7.26A, 1.75V/cell)
	143.2 Ah	(8hrs, 17.9A, 1.75V/cell)
	120.3 Ah	(3hrs, 40.1A, 1.75V/cell)
	105.6 Ah	(1hr, 105.6A, 1.67V/cell)
Max. Discharge Current		2015 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		2700 A
Max. Charging Current		46.5 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		
Dimensions	Length	335 ±3 mm (13.19 in)
	Width	172 ±2 mm (6.77 in)
	Height	275 ±2 mm (10.83 in)
	Total Height	278 ±3 mm (10.94 in)
Weight		42.4 Kg (93.5 lb)
Terminal		M6
Container Mat. (Flame retardant)		ABS UL94 HB (Optional VCI)
Recommended Torque		4 Nm (35.40 in-lb)
Maximum allowable torque		5.4 Nm (47.79 in-lb)



Unit: mm

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



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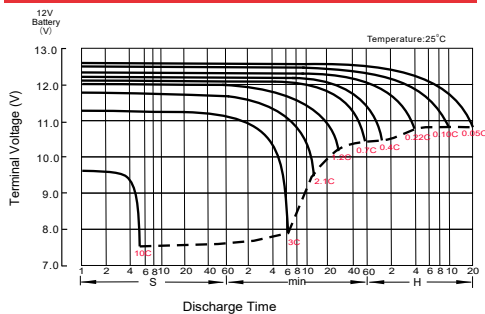
CONSTANT CURRENT DISCHARGE (AMPERES) AT 25°C (77°F)

Final V./ Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	282.7	229.7	197.9	173.4	139.3	106.0	87.0	51.5	37.2	29.6	24.6	21.4	17.1	13.7	7.17
1.80V/cell	327.4	254.0	218.0	192.0	151.7	114.1	92.1	54.0	38.8	30.7	25.5	22.1	17.6	14.0	7.28
1.75V/cell	381.3	284.1	241.7	207.9	162.8	121.1	97.3	56.3	40.1	31.5	26.1	22.6	17.9	14.3	7.57
1.70V/cell	425.9	312.2	265.5	225.9	174.3	127.9	102.0	58.2	41.2	32.3	26.7	23.0	18.3	14.6	7.76
1.67V/cell	466.9	344.0	289.1	240.4	181.8	133.3	105.6	60.1	42.4	33.1	27.3	23.5	18.7	14.9	7.95
1.60V/cell	502.7	372.2	305.0	253.4	191.1	138.9	109.5	61.7	43.2	34.0	28.0	24.2	19.1	15.2	8.16

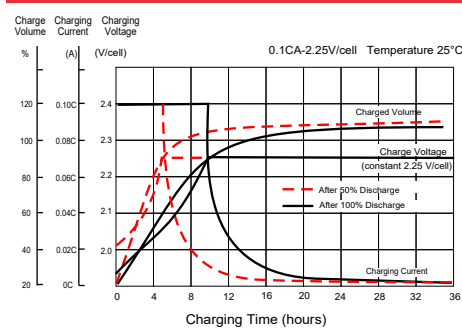
CONSTANT POWER DISCHARGE (WATTS/CELL) AT 25°C (77°F)

Final V. / Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	537.7	441.9	383.5	339.5	273.0	209.1	172.5	102.8	74.4	59.5	49.8	43.5	34.9	29.5	15.6
1.80V/cell	615.4	484.6	418.6	373.2	295.0	223.2	181.3	106.8	77.1	61.2	51.1	44.4	35.6	30.0	15.9
1.75V/cell	710.1	534.9	459.8	400.9	314.2	235.1	190.2	110.7	79.2	62.5	52.0	45.2	36.1	30.4	16.2
1.70V/cell	785.4	582.5	500.2	432.4	334.1	246.5	197.9	113.6	80.8	63.8	53.0	45.8	36.7	30.9	16.4
1.67V/cell	852.0	635.1	540.1	456.6	346.4	255.5	203.8	116.8	82.8	65.0	53.9	46.6	37.2	31.2	16.5
1.60V/cell	898.8	672.8	559.7	471.1	356.4	261.2	207.5	117.7	82.9	65.5	54.3	47.1	37.5	31.3	16.6

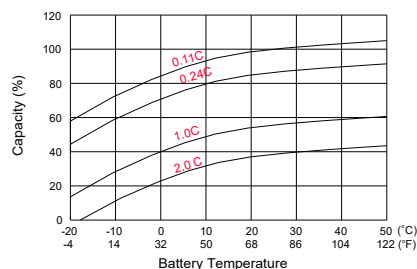
Discharge Characteristics



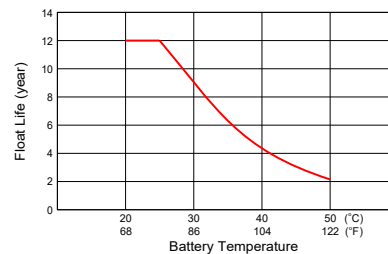
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature effects on Long Term Float Life



* Product specifications are subject to change without notice.

* US-V2509-REV-1.02

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