



OBS12700HRF (12V 700W)

High Rate VRLA Battery

Osonix HRF Serie Front Terminal Pure Lead Acid Batteries are designed with advanced technology to optimize performance and improve energy density. Utilize a special fine-mesh grid technology and specially formulated paste plates, which enhance the adhesion of the active material.



Features

- Absorbent Glass Mat (AGM) technology, maintenance-free.
- Front terminals for easy installation, maintenance, and monitoring.
- Pure lead technology ensuring extended service life, 12+ years.
- Advanced welding technology ensures excellent high-current charge/discharge capacity.
- Oxygen recombination efficiency $\geq 98\%$.
- PbCaSn alloy grids - reduced gassing and lower self-discharge.
- Full compliance with IATA/ICAO regulations - A67 approved (unrestricted transport by rail, road, sea and air).

Applications

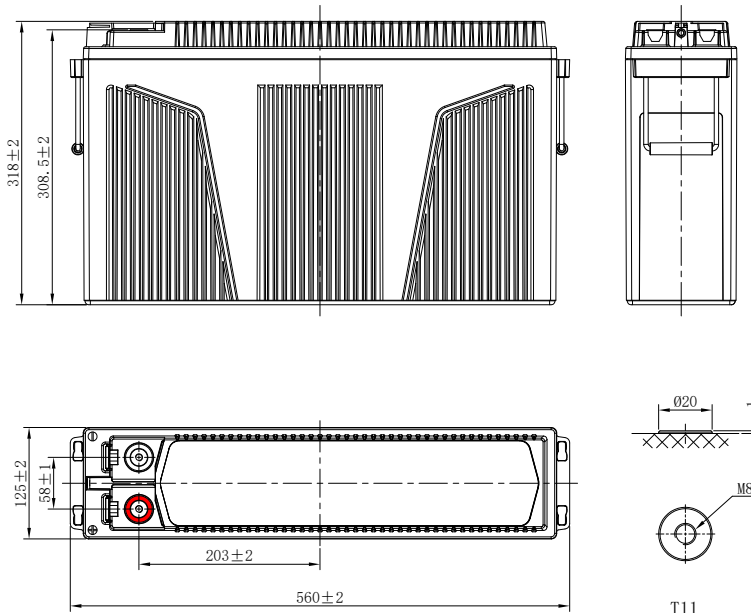
- Uninterruptible Power Supplies (UPS).
- Telecommunications Backup Power System.
- Emergency and Backup Power Sources.
- Power Plant Energy Storage Systems.
- Emergency Lighting.

PHYSICAL SPECIFICATION

Dimension	Length Width Height Total Height	560 $\pm$ 2 mm (22.01 in) 125 $\pm$ 2 mm (4.92 in) 318 $\pm$ 2 mm (12.5 in) 318 $\pm$ 2 mm (12.5 in)
Weight	60 Kg (132.3 lb)	
Terminal	M8	
Container Mat. (Flame retardant)	ABS UL94 HB o V0	
Recommended Torque	(11 ~ 14.7) N·m (97.35 ~ 130.1) in·lbs	

SPECIFICATIONS Standard @ 25°C (77°F)

Rated Voltage		12 V
Nominal Capacity (W) (15 min to 1.67 V/cell)		700W
Nominal Capacity (Ah) (10 h to 1.80 V/cell)		180 Ah
Rated Capacity	168.8 Ah 144 Ah 113.1 Ah	(8hrs, 21.1A, 1.75V/cell) (3hrs, 48A, 1.75V/cell) (1hrs, 113.1A, 1.60V/cell)
Max. Discharge Current	1800 A (5 s)	
Internal Resistance	3.2 mΩ	
Operating Temp. Range	Discharge Charge Storage	-20~55°C (-4~131°F) -20~40°C (-4~104°F) -15~50°C (5~122°F)
Max. charge Current	45 A	
Charge Voltage (25°C)	Float	13.5 ~ 13.8 V
	Temp. Coefficient	-3mV/cell/°C
	Equalization	13.8 ~ 14.4V
Design Life	≥ 12 years	



Compliance:

IEC 60896

CE, UL 1989, UL94 HB o V-0

Certified production IATF16949, ISO 9001, ISO 14001



Unit: mm

OBS12700HRF (12V 700W)

High Rate VRLA Battery



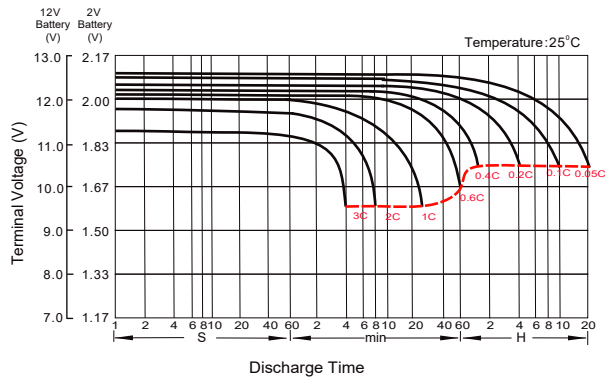
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V / Time	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
1.85V/cell	409.5	328.3	282.5	222.1	162.3	122.4	95	59.5	44.3	35	29.6	20.5	17.5
1.80V/cell	467	373.7	321	251.8	183.5	127.8	97.2	63	46.4	36.3	30.8	20.9	18
1.75V/cell	513.5	410.3	351.8	275.2	199.8	134.6	100.8	65.4	48	37.5	31.7	21.1	18.1
1.70V/cell	543.6	433.2	370	289	209.8	140	106	67	49	38.4	32.4	21.4	18.2
1.67V/cell	574.3	456.2	388.7	303	219.3	144.4	110.2	68.6	50	38.9	32.8	21.7	18.5
1.60V/cell	594.6	471.8	400.7	310.8	224.6	149.4	113.1	69.9	51.3	39.8	33.5	21.8	18.6

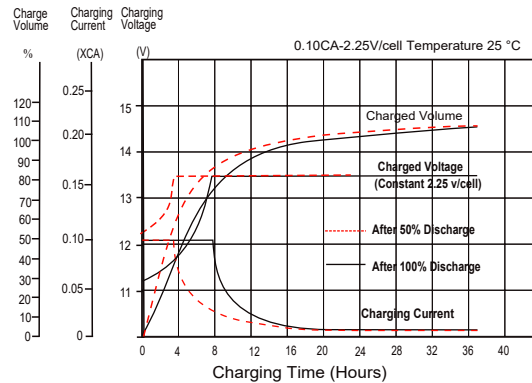
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V / Time	5 min	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h
1.85V/cell	764.8	617.7	534.8	422.5	310.2	253.3	183.8	115.7	86.6	68.7	58.4	40.7	34.8
1.80V/cell	587.9	692.9	599.9	473.9	347.9	244.1	187	121.9	90.2	71	60.4	41.4	35.7
1.75V/cell	926.9	748.7	648.2	512.1	376	255.6	193	126.1	93	73.1	61.9	41.7	35.9
1.70V/cell	965	779.4	674.8	533.1	391.4	264	201.9	128.6	94.7	74.6	63.2	42.3	36.1
1.67V/cell	1001	805.5	700	553	406	270.8	208.8	131.1	96.2	75.3	63.8	42.6	36.6
1.60V/cell	1015	819.8	709.8	560.7	411.7	277.5	212.7	132.8	98.1	76.7	64.8	42.8	36.7

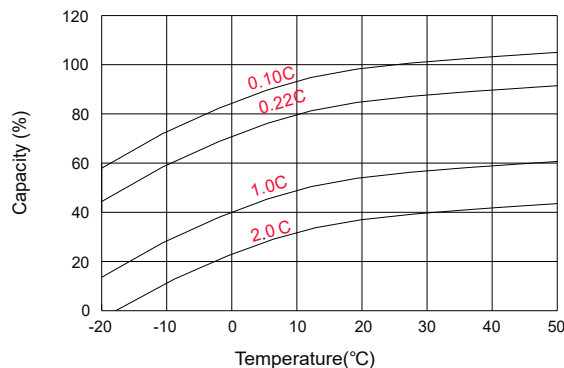
Discharge Characteristics



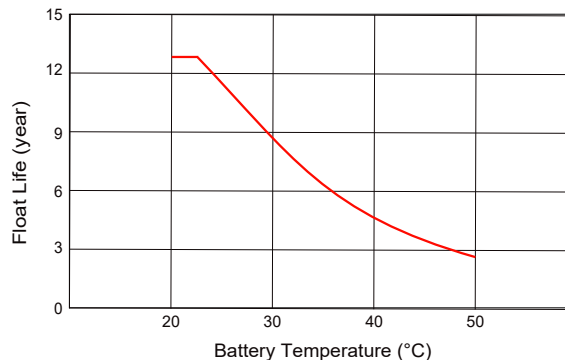
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



* Product specifications are subject to change without notice.

* US-V2606-REV1.02

©2026, OSONIX



Osonix

www.osonix.com

info@osonix.com

Kenjitsu USA

3111 Camino Del Rio North Suite 400
Mission Valley, San Diego CA 92108

KENJITSU

AUTHORIZED DISTRIBUTOR

(619) 431 4777

sales@kenjitsuusa.com

www.kenjitsuusa.com