



Product Data Sheet

IM Series: IM-12180NB (UT-12180NB)

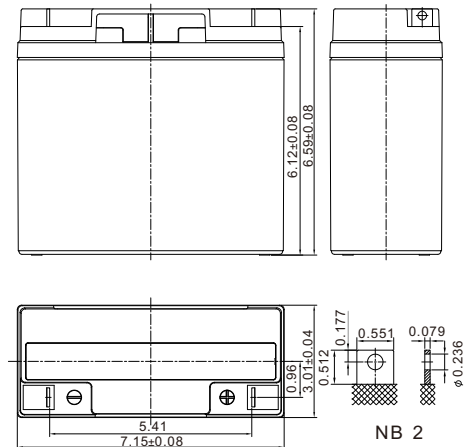
12 Volt, 18.0 Amp. Hour

Specifications

Rated Voltage	12V						
Nominal Capacity	18.0Ah	(C ₂₀ , 1.75V/cell, 20hrs)					
Dimensions	Length	7.14 inches (181.5 mm)					
	Width	3.01 inches (76.5 mm)					
	Container Height	6.59 inches (167.5 mm)					
	Total Height	6.59 inches (167.5 mm)					
Approx Weight	11.8 lbs (5.35 Kg)						
Terminal	NB 2						
Container Material	ABS						
Rated Capacity (25°C)	18.0 Ah	(20hr, 0.900A, 1.75V/cell)					
	17.0 Ah	(10hr, 1.70A, 1.75V/cell)					
	15.5 Ah	(5hr, 3.10A, 1.75V/cell)					
	13.8 Ah	(3hr, 4.59A, 1.75V/cell)					
	11.8 Ah	(1hr, 11.8A, 1.60V/cell)					
Max. Discharge Current	270A (5s)						
Internal Resistance (25°C)	Approx 16mΩ						
Operating Temp. Range	Discharge	5 ~ 122°F (-15 ~ 50°C)					
	Charge	-4 ~ 104°F (-20 ~ 40°C)					
	Storage	5 ~ 104°F (-15 ~ 40°C)					
Nominal Operating Temp. Range	77±5°F (25±3°C)						
Standby/Float Use	Initial Charging Current less than 5.4A. Voltage 13.5V~13.8V at 77°F(25°C)Temp. Coefficient -10mV/°F						
	Temperature Effect on Capacity	<table border="1"> <tr> <td>104°F (40°C)</td> <td>103%</td> </tr> <tr> <td>77°F (25°C)</td> <td>100%</td> </tr> <tr> <td>32°F (0°C)</td> <td>86%</td> </tr> </table>	104°F (40°C)	103%	77°F (25°C)	100%	32°F (0°C)
104°F (40°C)	103%						
77°F (25°C)	100%						
32°F (0°C)	86%						
Self Discharge	IM series batteries may be stored for up to 6 months at 77°F(25°C) and then a freshening charge is required. For higher temperatures - time interval will be shorter.						



Layout



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	54.7	37.5	29.2	24.0	17.9	13.1	10.7	7.84	6.16	4.45	3.54	3.02	2.58	2.03	1.66	0.880
1.80V/cell	58.9	39.8	30.6	25.0	18.4	13.4	11.0	8.00	6.28	4.52	3.59	3.06	2.62	2.06	1.69	0.890
1.75V/cell	62.0	41.4	31.7	25.7	18.9	13.7	11.2	8.15	6.39	4.59	3.64	3.10	2.65	2.09	1.70	0.900
1.70V/cell	64.9	43.0	32.7	26.4	19.4	14.0	11.4	8.29	6.48	4.66	3.69	3.14	2.68	2.11	1.72	0.907
1.67V/cell	67.2	44.2	33.5	27.0	19.7	14.2	11.6	8.40	6.56	4.70	3.73	3.17	2.71	2.12	1.73	0.914
1.60V/cell	71.3	46.1	34.7	27.8	20.3	14.6	11.8	8.58	6.69	4.79	3.79	3.22	2.75	2.15	1.75	0.924

C.O.V - Cutoff Voltage/cell. The battery is fully charged & being discharged to COV

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	103.5	71.4	55.9	46.3	34.6	25.4	20.8	15.3	12.1	8.74	6.98	5.95	5.11	4.03	3.31	1.76
1.80V/cell	110.3	75.2	58.3	47.9	35.5	25.9	21.3	15.6	12.3	8.87	7.07	6.03	5.18	4.09	3.35	1.78
1.75V/cell	114.9	77.6	59.9	48.9	36.2	26.4	21.6	15.8	12.4	8.98	7.16	6.10	5.23	4.13	3.38	1.80
1.70V/cell	119.2	80.2	61.5	50.1	37.0	26.9	21.9	16.1	12.6	9.10	7.24	6.17	5.29	4.17	3.41	1.81
1.67V/cell	122.3	82.0	62.8	51.0	37.5	27.3	22.2	16.2	12.7	9.18	7.30	6.22	5.33	4.20	3.43	1.83
1.60V/cell	127.2	84.4	64.5	52.3	38.4	27.8	22.6	16.5	12.9	9.32	7.41	6.30	5.40	4.25	3.47	1.85

C.O.V - Cutoff Voltage/cell. The battery is fully charged & being discharged to COV



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12 Volt, 18.0 Amp. Hour

Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- Auto control system

General Features

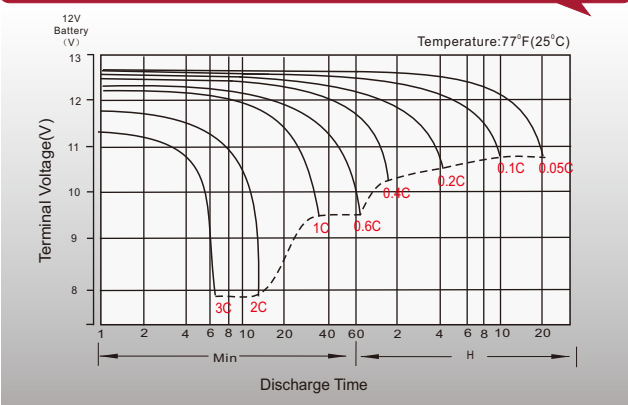
- 5 years design life(77°F)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- High purity PbCaSn raw material alloy is used for plate grids, assuring less gassing & low self-discharge rate
- High quality AGM separator: extend cycle life and prevent micro short circuit

Standards

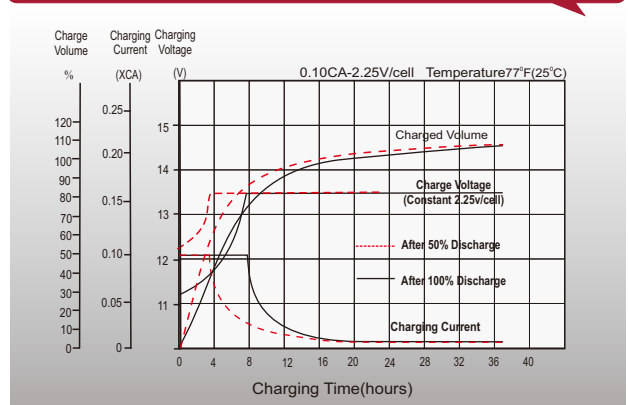
- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in IATF16949,ISO45001, ISO 9001 and ISO 14001 certified production facilities



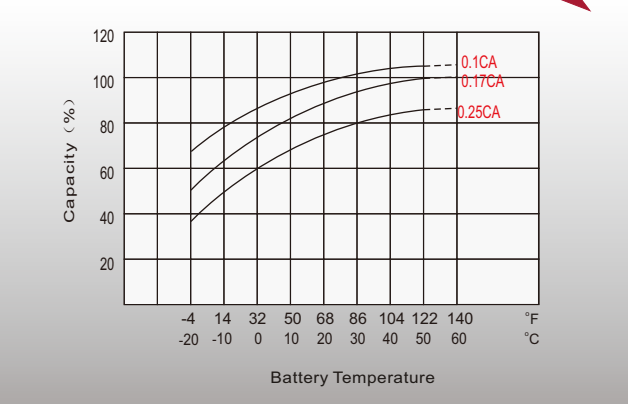
Discharge Characteristics



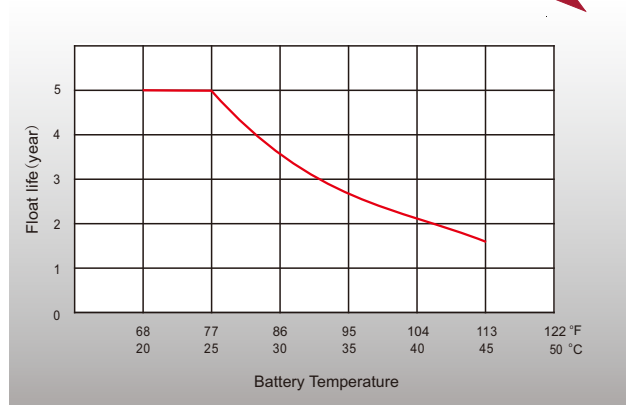
Standby/Float Charging Characteristics



Temperature Effectes on Battery Capacity



Temperature Effectes on Long Term Float Life



Sales Offices

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