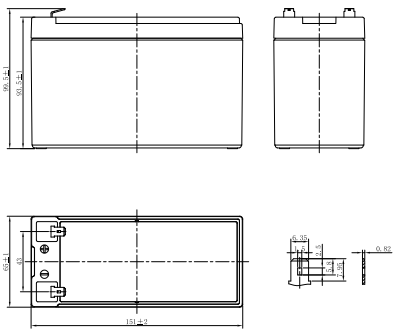
Product Data Sheet
IM Series: IM-1270
12 Volt, 7.0 Amp. Hour

Specifications

Rated Voltage		12V
Nominal Capacity	7.0Ah	(C_{20}, 1.75V/cell)
Dimensions	Length Width Container Height Total Height	5.95 inches (151mm) 2.56 inches (65mm) 3.68 inches (93.5mm) 3.92 inches (99.5mm)
Approx Weight		3.99 lbs(1.81 Kg)
Terminal		T1
Container Material		ABS
Rated Capacity (25°C)	7.00 Ah 5.59 Ah 5.15 Ah 4.59 Ah 3.94 Ah	(20hr,0.300A,1.75V/cell) (10hr,0.559A,1.75V/cell) (5hr,1.03A,1.75V/cell) (3hr,1.53A,1.75V/cell) (1hr,3.94A,1.60V/cell)
Max. Discharge Current		90A (5s)
Internal Resistance (25°C)		Approx 27mΩ
Operating Temp.Range	Discharge Charge Storage	5 ~ 122°F (-15 ~ 50°C) -4 ~ 104°F (-20 ~ 40°C) 5 ~ 104°F (-15 ~ 40°C)
Nominal Operating Temp. Range		77±5°F (25±3°C)
Standby/Float Use	Initial Charging Current less than 1.80A. Voltage 13.5V~13.8V at 77°F(25°C)Temp. Coefficient -10mV/°F	
Temperature Effect on Capacity	104°F (40°C) 77°F (25°C) 32°F (0°C)	103% 100% 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	19.5	14.4	11.6	9.45	7.02	5.16	4.21	3.08	2.42	1.74	1.38	1.18	1.00	0.789	0.637	0.343
1.80V/cell	21.1	15.1	12.0	9.74	7.21	5.26	4.29	3.13	2.45	1.76	1.40	1.19	1.02	0.798	0.644	0.347
1.75V/cell	22.9	15.9	12.5	10.0	7.37	5.37	4.38	3.19	2.49	1.79	1.41	1.20	1.03	0.807	0.652	0.350
1.70V/cell	24.6	16.6	13.0	10.3	7.55	5.47	4.45	3.23	2.53	1.81	1.44	1.23	1.04	0.818	0.660	0.354
1.67V/cell	25.6	17.0	13.2	10.5	7.65	5.53	4.49	3.27	2.56	1.83	1.45	1.23	1.05	0.824	0.665	0.356
1.60V/cell	27.9	18.1	13.8	10.9	7.89	5.68	4.60	3.34	2.60	1.87	1.47	1.25	1.07	0.838	0.676	0.361

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	37.1	27.4	22.3	18.2	13.5	10.0	8.20	6.01	4.73	3.41	2.72	2.31	1.98	1.56	1.26	0.686
1.80V/cell	40.0	28.7	23.0	18.7	13.9	10.2	8.33	6.09	4.78	3.45	2.75	2.35	2.01	1.58	1.28	0.693
1.75V/cell	42.9	30.0	23.7	19.1	14.1	10.3	8.45	6.17	4.84	3.50	2.79	2.37	2.03	1.60	1.30	0.700
1.70V/cell	45.9	31.2	24.4	19.6	14.4	10.5	8.56	6.27	4.91	3.54	2.81	2.40	2.05	1.62	1.31	0.707
1.67V/cell	47.5	31.9	24.9	20.0	14.6	10.6	8.63	6.31	4.95	3.57	2.84	2.42	2.07	1.63	1.32	0.712
1.60V/cell	51 2	33 6	25 8	20 5	14 9	10 8	8.80	6.42	5.03	3.63	2.88	2.45	2.10	1.66	1.34	0.722

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

Product Data Sheet
IM Series: IM-1270
12 Volt, 7.0 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

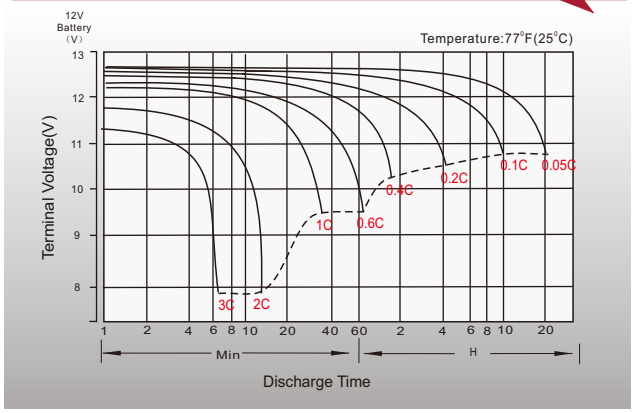
General Features

- 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

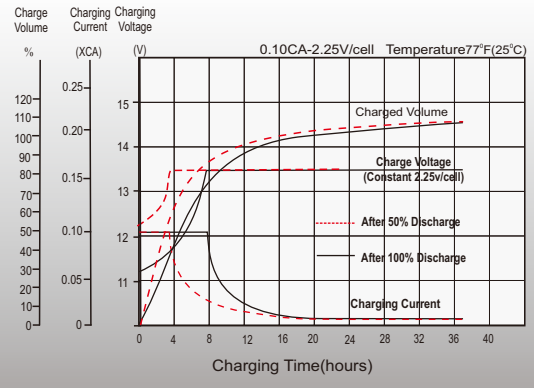
- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in IATF16949,ISO45001, ISO 9001 and ISO 14001 certified production facilities

Discharge Characteristics

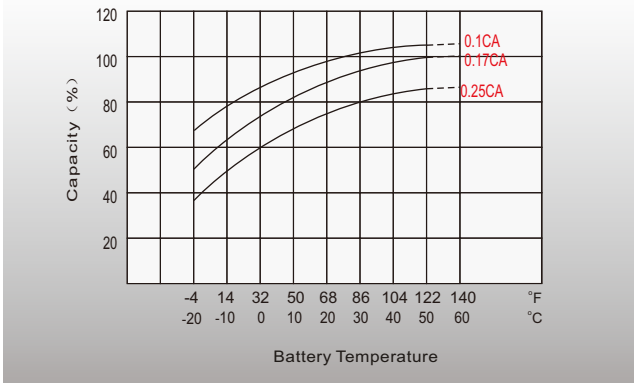


Curves represent Constant Current draw (Amp.)
1C curve = 1 x Nominal capacity= 7.5amp. constant draw 0.05C curve = 0.05 x Nominal capacity = 0.375amp. draw

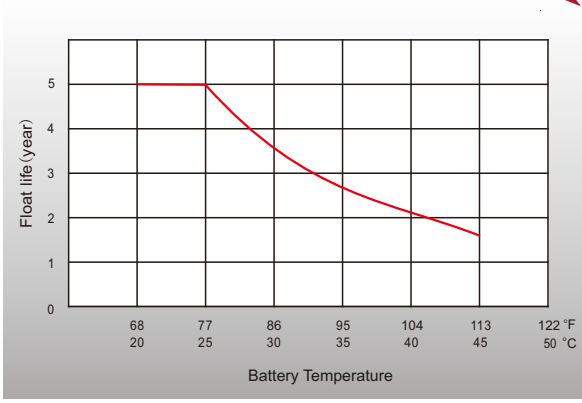
Standby/Float Charging Characteristics



Temperature Effects on Battery Capacity



Temperature Effects on Long-Term Float Life



Sales Offices

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