

20 Years Design Life	TPPL Technology	5 Years Warranty*	-35 °C ~ +65 °C Temperature
 High Rate Type	 UPS	 Emergency Lighting	 Recyclable

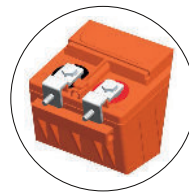
Pure Lead Power

450-12FT M8V0 (12V450W)

Item Nr.: SSB2037905

Applications (for industrial standby use)

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Communication power supply
- DC power supply



Certificates



Conform to
IEC60896-21&22

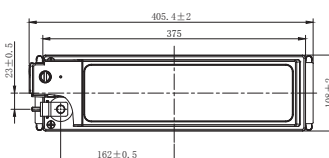
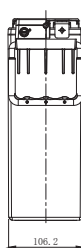
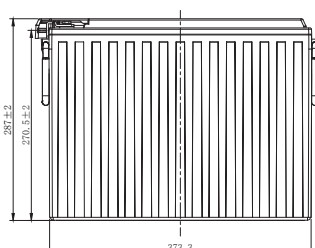
Specifications

Nominal Voltage	12V	Float Charge	2.285V/cell @ 20°C, 2.270V/cell @ 25°C
Open-circuit voltage	12.96V (fully charged)		Temperature coefficient: -3mV/cell/°C
Nominal Rate	450.0W/cell (W ₁₅ , 1.60V/cell)	Boost Charge	2.395V/cell @ 20°C, 2.375V/cell @ 25°C
Nominal Capacity	109Ah (C ₁₀ , 1.80V/cell)		Temperature coefficient: -4mV/cell/°C
Approx. Weight	30.8kg	Charging Current	0.1-0.3C
Terminal	M8	Self Discharge	SSB Battery PLP batteries may be stored for up to 24 months at 20°C (self-discharge per month ≤0.5%). For higher temperatures the time interval will be shorter. Batteries need to be given a freshening charge when the OCV is <12.72 V/block or when the maximum storage time is reached, whichever occurs first.
Container Material	FT (M-M8)/TT (F-M8)		
Max. Discharge Current	1200A (5 s) 425.8A (30)		
Short-circuit Current	2000A		
Internal Resistance / Impedance (1kHz)	Approx. 4.5mΩ (±10 %)		
Nominal Oper. Temp. R.	20±2°C	Life Expectancy	>12 years according to EUROBAT (Very Long Life)
Operating Temp. Range	Discharge: -35~65°C Charge: -20~45°C Storage: 5~30°C		20 years Design Life

Dimensions

- Unit: mm | Dimensions: 405.4 Length X 108 Width X 287 Height (287 Height incl. Terminal)

- TT(F-M8)/FT(M-M8)



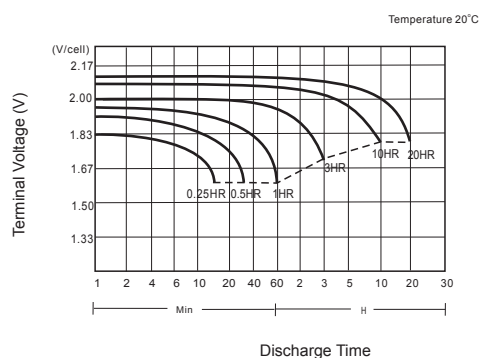
Constant Current Discharge (Amperes) at 20°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	220.9	197.1	167.3	137.9	109.7	88.8	68.7	41.1	28.5	22.0	18.2	13.0	10.7	5.3
1.80V/cell	248.8	218.3	187.1	148.5	115.7	91.8	70.9	42.2	29.2	22.6	18.7	13.3	10.9	5.4
1.75V/cell	278.0	234.5	197.2	155.2	119.1	94.6	73.0	43.3	30.0	23.0	19.1	13.6	11.0	5.4
1.70V/cell	299.2	250.7	208.6	163.0	123.4	97.7	75.1	44.4	30.7	23.3	19.3	13.6	11.0	5.5
1.67V/cell	320.5	266.8	219.2	170.4	128.3	101.3	77.7	45.0	31.1	23.8	19.5	13.6	11.1	5.5
1.60V/cell	340.8	284.4	230.6	177.7	135.0	104.0	79.6	46.1	31.9	24.1	19.7	13.7	11.2	5.6

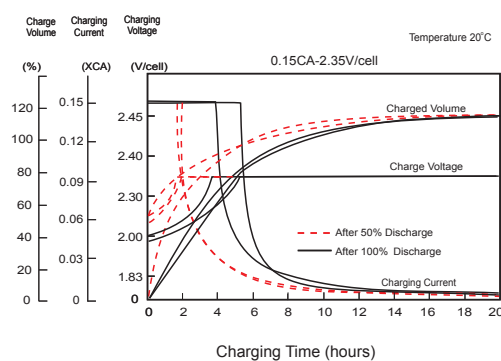
Constant Power Discharge (Watts/cell) at 20°C

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	438.6	389.9	334.2	277.2	222.4	181.4	140.8	84.8	59.0	45.5	38.0	26.4	21.9	10.4
1.80V/cell	482.6	423.8	368.1	295.6	232.6	185.0	143.6	86.1	59.6	46.2	38.4	27.0	22.0	10.7
1.75V/cell	528.6	447.3	382.2	303.4	234.9	188.1	146.1	87.2	60.5	46.4	38.5	27.5	22.1	10.8
1.70V/cell	566.7	475.2	410.9	323.0	244.2	193.0	148.7	88.4	61.5	46.6	38.6	27.5	22.1	10.9
1.67V/cell	603.9	503.8	429.0	335.7	252.5	199.4	153.0	89.1	61.8	47.5	39.0	27.5	22.2	10.9
1.60V/cell	639.5	534.5	450.0	347.4	263.5	202.9	155.5	90.5	63.0	47.8	39.1	27.7	22.5	11.0

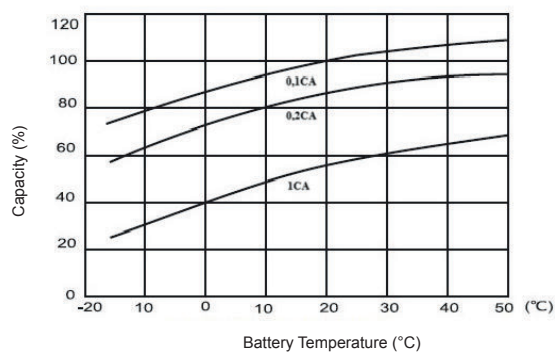
Discharge Characteristics



Charging Characteristics



Effect of Temperature on Capacity



Float Life Characteristics

