

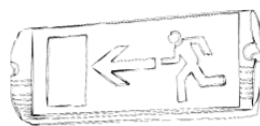
Product features

- Maintenance free battery, no need for watering
- Specific environmentally friendly formation process
- Spill & leak proof construction
- Analytical grade electrolyte
- Safety valves
- Container and lid made from ABS (UL 94 V-0 version available on request)
- Low self-discharge
- Non dangerous good according to FAA and IATA classification
- Complies with the following standards: IEC 60896-21/22, EUROBAT
- Tested by Det Norske Veritas / Germanischer Lloyd



Specification

Nominal voltage	12 V
Nominal capacity	18 Ah
Design life	12 years
Operating temperature	-20°C to 50°C (-4°F to 122°F)
Grid alloy	Lead-calcium-tin
Electrode design	Flat grid, pasted
Separator	Absorbent Glass Mat (AGM)
Active material	High purity lead and lead dioxide
Container and lid	ABS UL 94 HB (V-0 version on request)
Charge voltage	Float charging: 2.275 Vpc @ 20°C (68°F) Cyclic use: see instruction for use
	Maximum ripple: 0.05 C (A)
Electrolyte	Purified high grade sulfuric acid
Safety valve	EPDM rubber, opening pressure 10.5 to 14 kPa (1.5 to 2 psi), closing pressure ca. 7 kPa (1 psi)
Terminal	Insert M5



CTM GmbH encourages environmental awareness. Please observe all existing guidelines for recycling/disposal of lead.

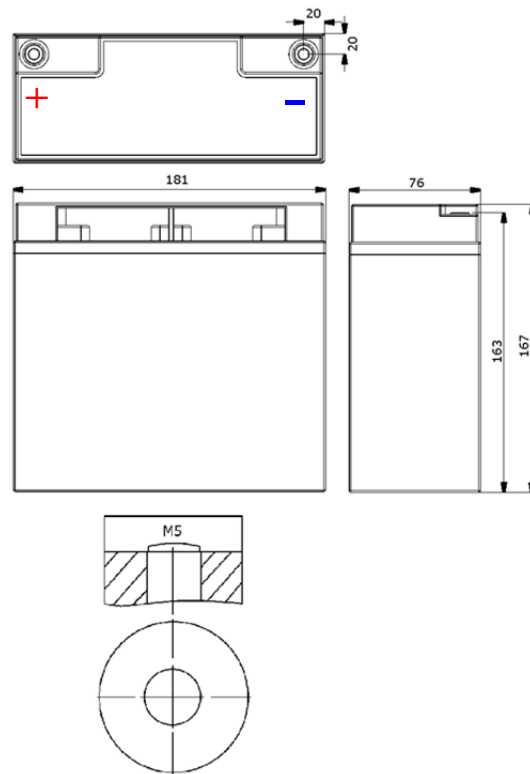
Physical Data

Dimension (±2 mm/± 0.08 inch)

Length	181 mm	7.13 inches
Width	76 mm	2.99 inches
Height	167 mm	6.57 inches
Height incl. terminal	-	-
Weight	5.45 kg	12.04 lbs.
Terminal	Standard	Insert M5
	Option	-

Electrical Data

Nominal voltage		12 V
Capacity 20°C (68°F) to 1.7 Vpc	20 h	18.1 Ah
	10 h	17.1 Ah
	5 h	16.0 Ah
	1 h	11.9 Ah
	15 min	8.4 Ah
	Internal resistance	9 mΩ
	Impedance	400 S
Temperature correction factors (C20)	40°C (104°F)	102%
	20°C (68°F)	100%
	0°C (32°F)	85%
	-15°C (5°F)	65%
Self-discharge at 20°C (68°F) - capacity after	1 month storage	98%
	3 months storage	94%
	6 months storage	86%
Short circuit current	A @ 20°C (68°F)	900
Charging voltage	Float charging	2.27-2.30 Vpc 25-15°C (77-59°F)
	cyclic	See operating instruction



Constant current discharge – A @ 20°C (68°F)

Uf Vpc	5 min	10 min	15 min	20 min	30 min	60 min	2 h	5 h	8 h	10 h	20 h
1.85	56.2	38.0	28.9	23.9	18.2	10.2	5.8	2.7	1.8	1.4	0.7
1.80	60.0	40.6	30.9	25.5	19.4	10.9	6.2	2.9	1.9	1.5	0.8
1.75	63.9	43.2	32.9	27.1	20.6	11.6	6.6	3.1	2.0	1.6	0.8
1.70	65.3	44.1	33.6	27.7	21.1	11.9	6.7	3.1	2.0	1.7	0.9
1.65	66.1	44.7	34.0	28.1	21.4	12.0	6.8	-	-	-	-
1.60	66.8	45.1	34.4	28.3	21.6	12.1	6.9	-	-	-	-

Constant power discharge – Watt per cell @ 20°C (68°F)

Uf Vpc	5 min	10 min	15 min	20 min	30 min	60 min	2 h	5 h	8 h	10 h	20 h
1.85	119	74.9	57.3	46.8	35.0	20.2	11.3	5.5	3.7	3.0	1.6
1.80	127	80.0	61.2	49.9	37.4	21.6	12.1	5.9	4.0	3.3	1.7
1.75	135	85.1	65.1	53.1	39.8	22.9	12.8	6.3	4.2	3.5	1.9
1.70	138	87.0	66.6	54.3	40.7	23.4	13.1	6.4	4.3	3.5	1.9
1.65	140	88.1	67.4	55.0	41.2	23.7	13.3	-	-	-	-
1.60	141	88.9	68.1	55.5	41.6	24.0	13.4	-	-	-	-

Capacity – Ah @ 20°C (68°F)

Uf Vpc	2 h	3 h	5 h	8 h	10 h	20 h
1.85	11.7	12.7	13.7	14.4	14.7	15.6
1.80	12.5	13.6	14.7	15.4	15.7	16.7
1.75	13.3	14.5	15.6	16.4	16.7	17.8
1.70	13.6	14.8	16.0	16.7	17.1	18.1
1.65	13.8	15.0	-	-	-	-
1.60	13.9	15.1	-	-	-	-

