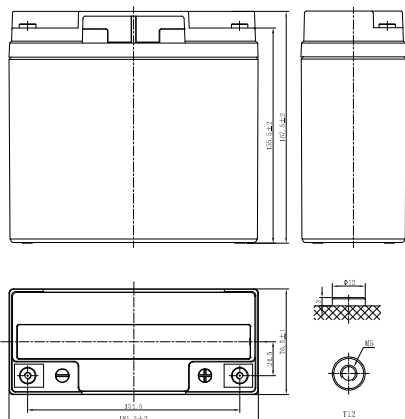


LTL SERIES-Long Life Standby

LTL12-18 (12V18Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C_{20} 1.75V/cell	18Ah
Dimension	Length	181.5mm (7.15inches)
	Width	76.5mm (3.01inches)
	Container Height	167.5mm (6.59inches)
	Total Height	167.5mm (6.59inches)
Approx Weight	5.35kg (11.8lbs)	
Terminal	T12/T12-I(M5)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	504A	
Internal Resistance (25°C)	Approx 16 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-15~50°C (5~122°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current (25°C)	0.3C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F). LTL series batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

DISCHARGE TABLE

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

LTL SERIES-Long Life Standby

LTL12-18 (12V18Ah)



APPLICATIONS

- UPS and EPS
- Emergency light
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply, DC power supply

GENERAL FEATURES

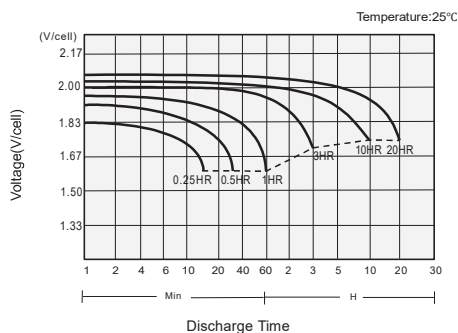
- 10~12 years design life (25°C)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

STANDARDS

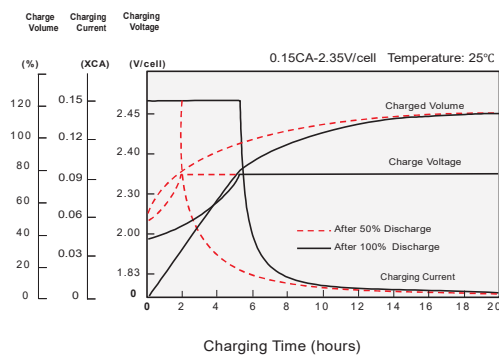
- Compliance with IEC 60896 standards, EU Battery Directive

? Manufactured in IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

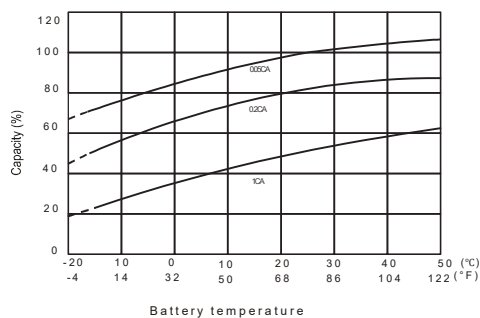
Discharge Characteristics



Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics

