



PLC-Pure Lead Long Cycle Life PLC 190FT (12V170Ah)

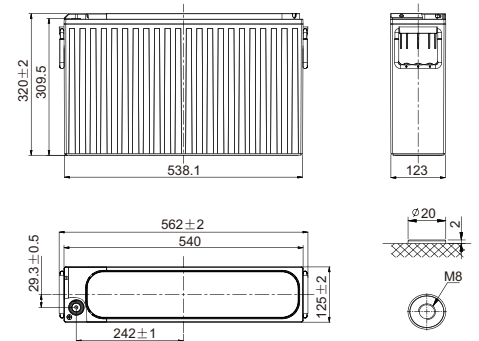


Specifications

Rated Voltage	12V	
Nominal Capacity	C ₁₀ , 1.80V/cell	135Ah
	C ₂₀ , 1.80V/cell	140Ah
Dimension	Length	562±2mm (22.1 inches)
	Width	125±2mm (4.92 inches)
	Container Height	320±2mm (12.6 inches)
	Total Height	320±2mm (12.6 inches)
Approx. Weight	58.7 Kg (129.4 lbs)	
Terminal	M8	
Container Material	PC-ABS flame retardant jar and cover to UL94 V-0	
Rated Capacity (25°C)	180.0 Ah	(20hr, 9.00A, 1.80V/cell)
	170.0 Ah	(10hr, 17.0A, 1.80V/cell)
	156.5 Ah	(5hr, 31.3A, 1.75V/cell)
	144.6 Ah	(3hr, 48.2A, 1.75V/cell)
	121.6 Ah	(1hr, 121.6A, 1.60V/cell)
Max. Discharge Current	1500A	
Internal Resistance (25°C)	Approx. 3.0mΩ(Fully charged)	
Operating Temp. Range	Discharge	-40 ~ 65°C (-40 ~ 149°F)
	Charge	0 ~ 54°C (32 ~ 129°F)
	Storage	-20 ~ 40°C (-4 ~ 104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max. Charging Current(25°C)	51.0A	
Charge voltage(25°C)	Float	13.62V
	Temp. Coefficient	-3mV/cell/°C
	Equalization(Cycle)	14.1~14.4V
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	PIC series batteries can be stored up to 24 months at 25°C(77°F), For higher temperatures the time interval will be shorter. Battery needs to be given a freshening charge when the OCV approach 2.10V/cell or when the maximum storage time is reached, whichever occurs first.	



Layout



Unit: mm

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	258.8	236.6	209.3	170.1	132.4	110.0	65.5	46.9	36.8	30.5	20.5	16.90	8.81
1.80V/cell	292.0	256.4	223.6	176.6	136.5	112.9	66.5	47.6	37.4	31.1	20.8	17.00	9.00
1.75V/cell	316.7	271.4	234.8	184.3	141.9	115.5	67.2	48.2	37.9	31.3	20.9	17.10	9.05
1.70V/cell	342.7	289.0	245.3	190.0	144.8	117.5	68.0	48.7	38.1	31.5	21.0	17.20	9.08
1.67V/cell	361.5	301.9	253.0	196.1	147.8	119.7	68.8	49.0	38.5	31.7	21.1	17.30	9.13
1.60V/cell	378.6	313.0	260.6	202.1	150.5	121.6	69.8	49.5	38.8	32.0	21.2	17.50	9.16

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.85V/cell	495.6	457.0	407.9	334.1	261.6	218.1	130.8	93.9	74.1	61.6	41.6	35.6	18.0
1.80V/cell	552.8	489.2	431.8	344.3	267.9	222.6	132.1	95.1	75.0	62.4	42.0	35.7	18.3
1.75V/cell	590.3	512.7	449.2	356.2	276.2	226.3	133.1	95.9	75.5	62.7	42.1	35.8	18.3
1.70V/cell	631.6	539.8	464.0	363.9	280.1	229.1	133.9	96.3	75.9	63.0	42.2	35.9	18.3
1.67V/cell	655.7	556.4	473.3	372.9	284.2	232.3	135.1	96.7	76.2	63.2	42.3	36.0	18.4
1.60V/cell	676.4	570.1	482.0	380.6	287.4	233.8	135.6	97.0	76.4	63.5	42.6	36.2	18.4



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Applications

- Unstable Grid System
- UPS System
- Renewable Energy System

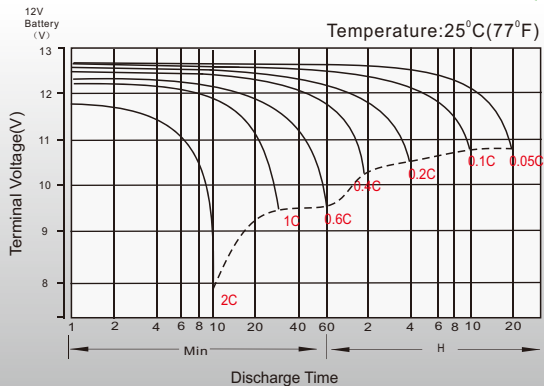
General Features

- 15 years design life(25°C)
- Outstanding high rate charge capability with Thin Plate Pure Lead technology
- High-rate performance, high energy density
- Virgin pure lead plates / copper alloy
- High quality AGM separators minimize electrical resistance to allow high current discharging properties.

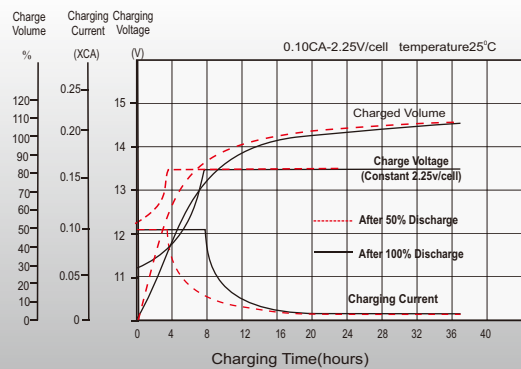
Standards

- Compliance with IEC 60896 standards
- UL, CE Certified
- Manufactured in Leoch@IATF16949, OHSAS 18001, ISO 9001 and ISO 14001 certified production facilities

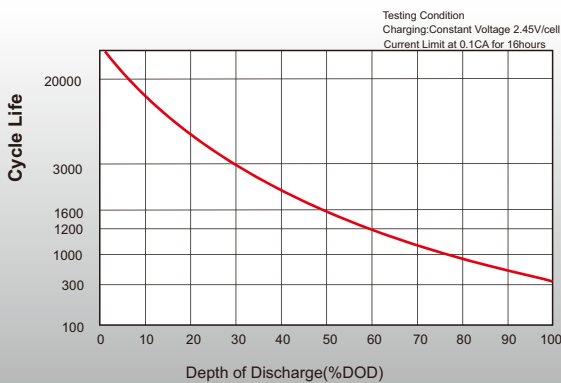
Discharge Characteristics



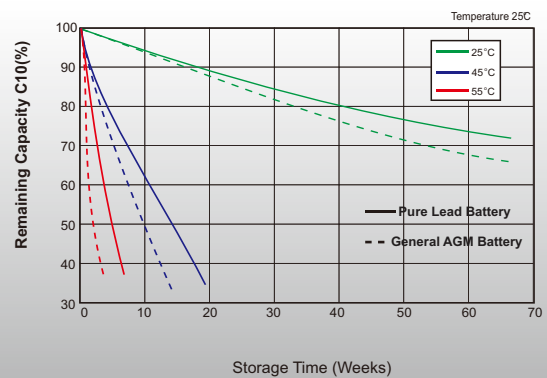
Float Charging Characteristics



Cycle Life vs. Depth of Discharge



Self-discharge Characteristics



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