



GENERAL PURPOSE **BATTERIES**

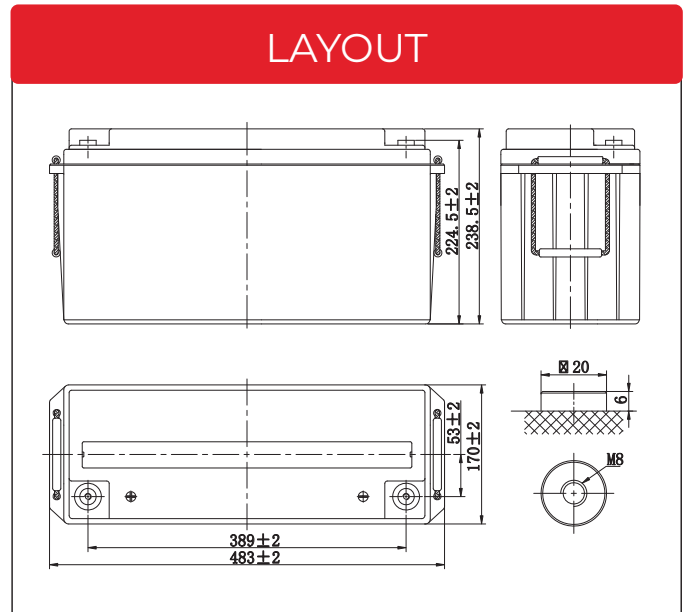
ST12-150 (12V 150Ah)



www.starmaxbatteries.com

ST SERIES - GENERAL PURPOSE

ST12-150



General Features

- ✓ 10 years design life(25°C)
- ✓ Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- ✓ PbCaSn alloy for plate grids: less gassing, less self-discharging
- ✓ High quality AGM separator: extend cycle life and prevent micro short circuit
- ✓ High purity raw material: ensure low self discharge rate

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

Standards

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



SPECIFICATIONS

Rated Voltage	12V	
Nominal Capacity	150.0Ah	(C ₁₀ ,1.80V/cell)
Dimensions	Length	483±2mm (19.0 inches)
	Width	170±2mm (6.69 inches)
	Container height	238.5±2mm (9.39 inches)
	Total height	238.5±2mm (9.39 inches)
Approx. weight	43.2 Kg (95.3 lbs)	
Terminal	M8	
Container material	ABS	
Rated capacity (25°C)	157.6 Ah	(20hr,7.88A,1.80V/cell)
	150.0 Ah	(10hr,15.0A,1.80V/cell)
	136.5Ah	(5hr,27.3A,1.75V/cell)
	124.2 Ah	(3hr,41.4A,1.75V/cell)
	95.6 Ah	(1hr,95.6A,1.60V/cell)
Max. discharge current	1500A (5s)	
Internal resistance (25°C)	Approx 3.5mΩ	
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)	
Cycle Use	Initial Charging Current less than 45.0A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	Initial Charging Current less than 45.0A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self discharge	ST series batteries may be stored for 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.	

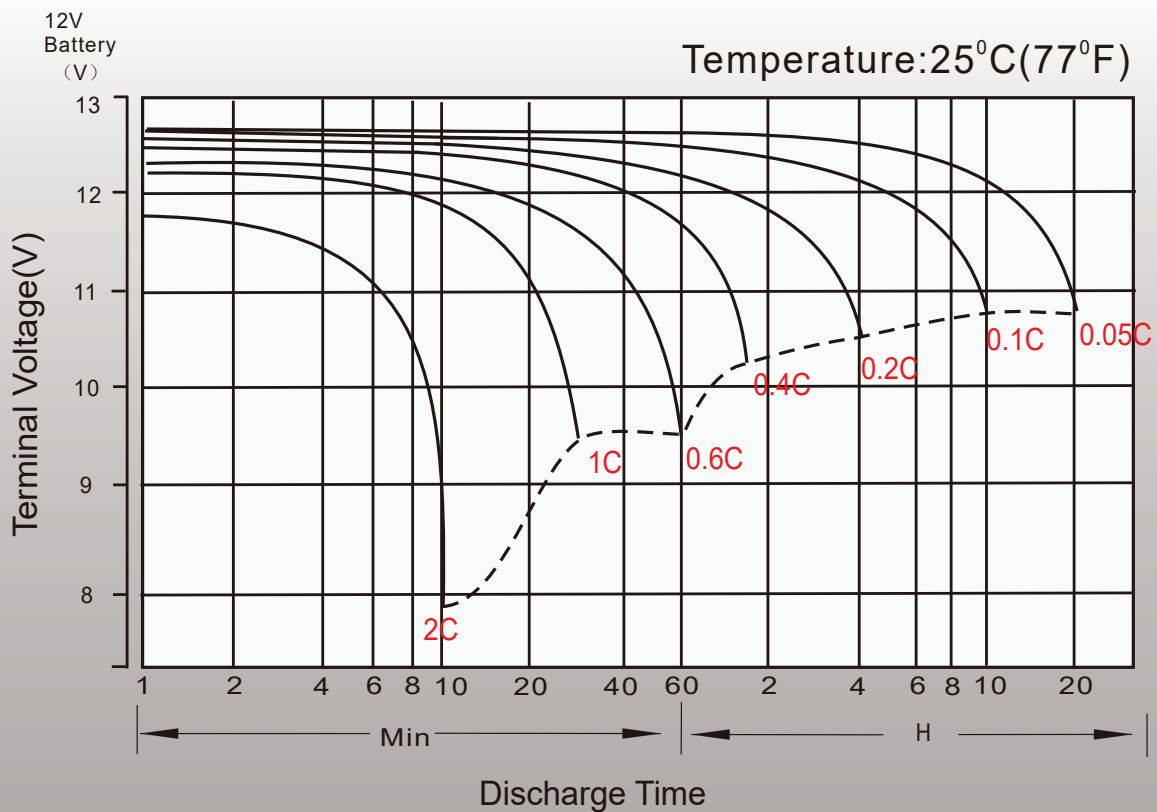
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	305.9	217.5	192.4	151.3	135.3	98.9	83.8	60.7	51.1	37.5	29.4	25.5	22.5	17.3	14.3	7.60
1.80V/cell	347.8	246.9	218.0	171.1	147.3	104.8	86.8	62.8	52.7	40.7	31.4	26.8	24.2	18.2	15.0	7.88
1.75V/cell	377.8	267.7	236.0	184.7	150.3	108.6	91.1	66.0	55.5	41.4	32.0	27.3	24.3	18.3	15.2	7.95
1.70V/cell	403.9	285.4	250.7	195.8	153.3	110.8	92.9	67.3	56.6	42.2	32.5	27.8	24.5	18.6	15.3	8.03
1.67V/cell	418.0	294.5	258.0	201.2	155.6	112.4	94.3	68.3	57.4	42.6	33.0	28.3	24.6	18.8	15.5	8.13
1.60V/cell	432.8	304.5	266.0	206.3	157.8	114.0	95.6	69.3	58.3	43.0	33.4	28.7	24.8	19.1	15.7	8.23

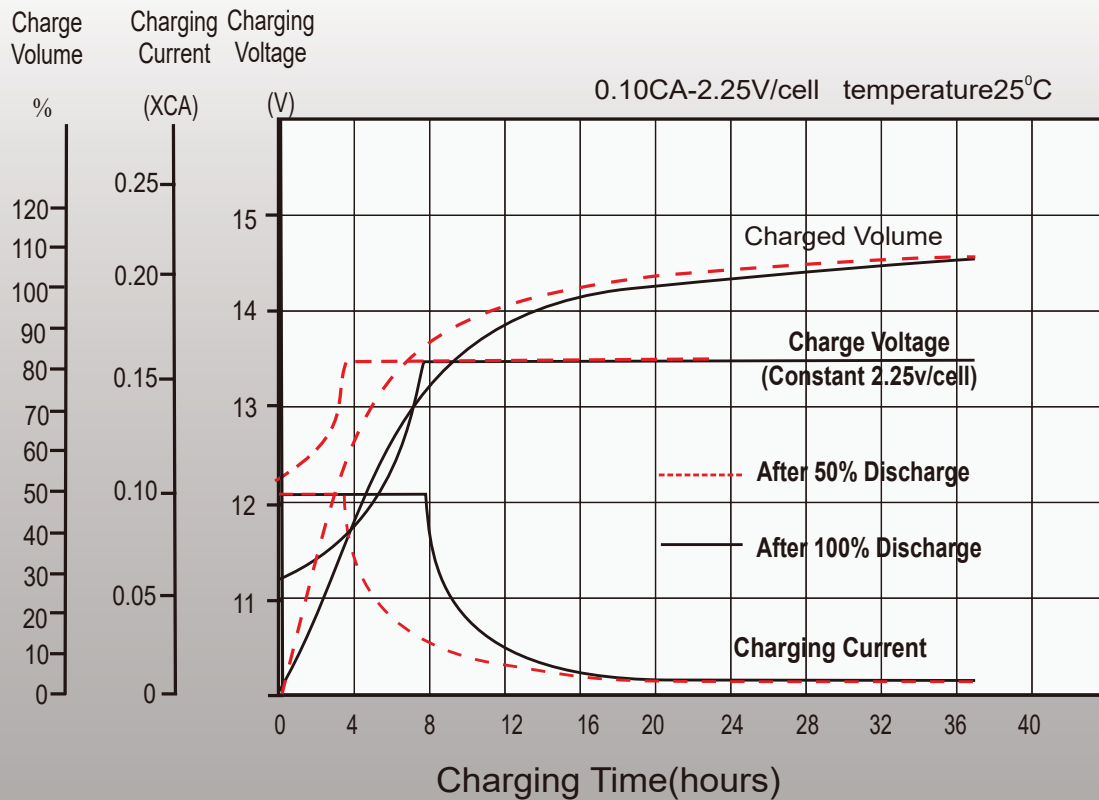
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	559.6	400.8	364.3	287.8	258.5	190.2	162.1	117.8	99.3	73.2	57.6	50.2	44.4	34.3	28.5	15.1
1.80V/cell	625.9	448.3	407.5	321.9	279.2	200.2	167.0	121.2	102.1	79.1	61.3	52.6	47.5	36.0	29.8	15.7
1.75V/cell	668.0	478.5	434.9	343.6	282.8	206.2	174.4	126.8	107.0	80.4	62.2	53.4	47.8	36.1	30.1	15.8
1.70V/cell	702.3	503.0	457.2	361.2	286.0	208.9	177.0	128.8	108.7	81.6	63.1	54.1	47.9	36.6	30.3	15.9
1.67V/cell	713.7	511.2	464.7	367.1	288.0	210.8	178.6	130.0	109.8	82.1	63.8	55.0	48.0	37.0	30.7	16.1
1.60V/cell	723.7	518.4	471.2	372.2	289.3	211.8	179.9	131.0	110.7	82.4	64.3	55.5	48.2	37.4	31.0	16.3

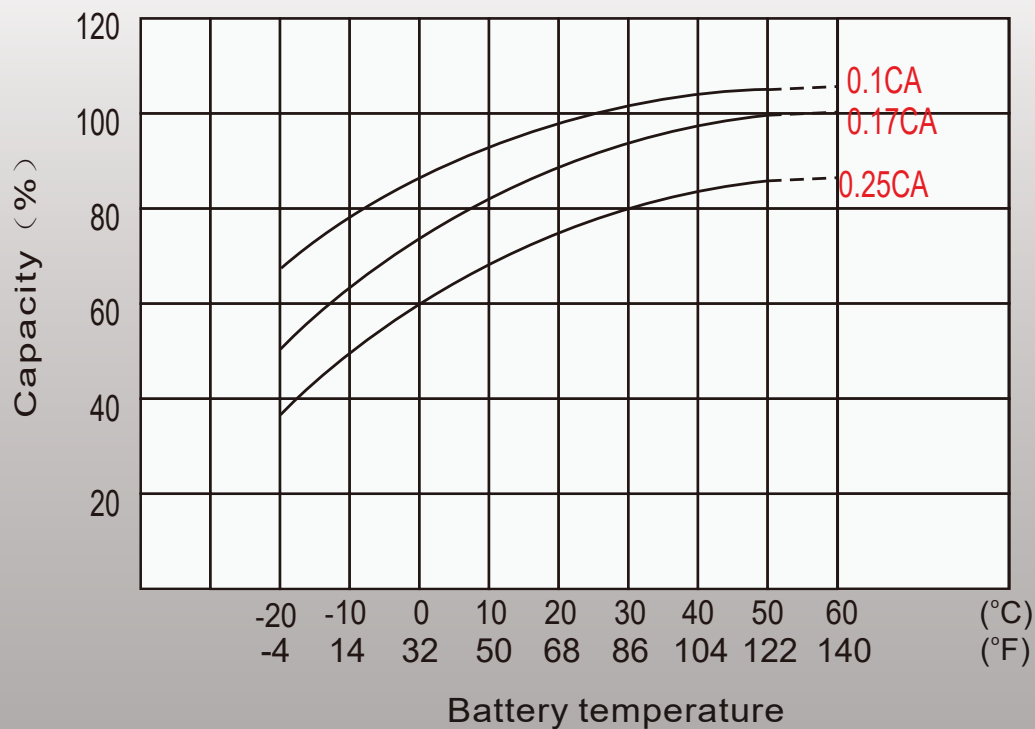
Discharge Characteristics



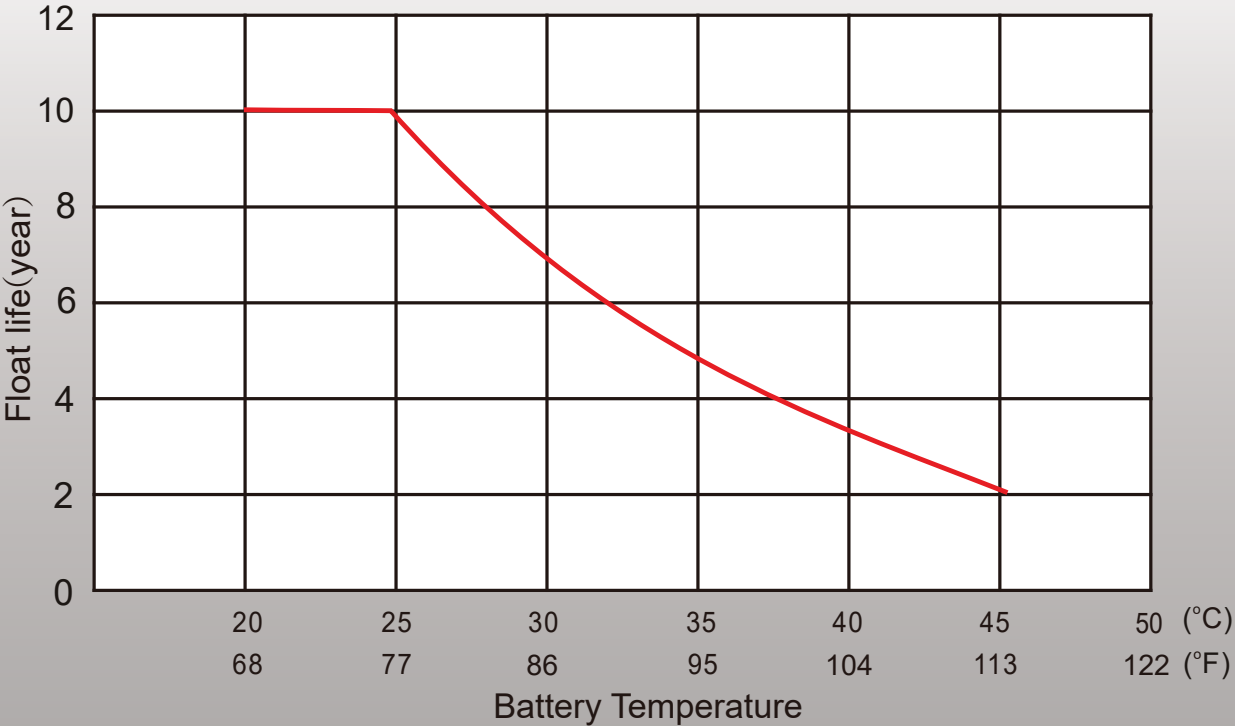
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



ST12-150 (12V 150Ah)



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