

# **E-SERIES**

# AGM325/370/539 }}}

Stryten Energy AGM325, 370 and 539 batteries incorporate advanced VRLA technology designed for highrate performance in critical UPS and power supply applications. This battery's positive plates are designed for UPS applications with a design life of ten years at 25°C (77°F) and standard ABS plastic jar and covers that meet UL94 V-O flame retardant requirements. E-Series AGM batteries were built with convenience in mind. They feature a multi-cell design for faster installation in cabinets or on racks, and heavy-duty copper alloy terminals for ease of assembly and reduced maintenance.

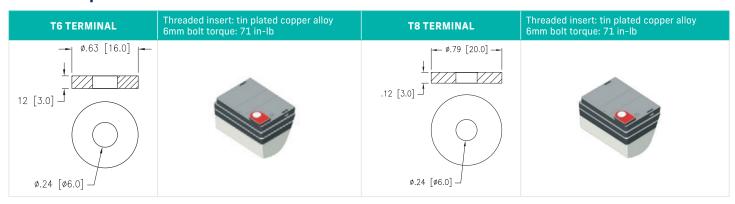


THE ENERGY TO CHALLENGE

#### **Battery Specifications**

NOMINAL		RATED CAPACITY		NOMINAL DIMENSIONS (IN)				NOMINAL	INTERNAL	SHORT	
MODEL NUMBER	NOMINAL VOLTAGE (V)	15 MIN. WPC 1.67 VPC	20 HR (AH) 1.80 VPC	LENGTH	WIDTH	HEIGHT	TERMINAL HEIGHT	WEIGHT (LBS)	RESISTANCE (MILLIOHMS)	CIRCUIT CURRENT (AMPS)	TERMINAL TYPE
S12V325FL	12	324.9	82	10.24	6.61	8.19	8.31	52.9	4.5	1640	T6
S12V370FL	12	370.3	95	12.05	6.61	8.15	8.27	61.7	4.0	1900	T6
S12V539FL	12	539.0	155	13.19	6.77	10.83	10.95	93.5	3.1	3100	Т8

#### **Terminal Specifications**



#### **Discharge Performance (Constant Power Discharge)**

1.85V PER CELL - CONSTANT POWER (WATTS/CELL) DISCHARGE @ 25°C									
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min		
S12V325FL	345.5	267.9	247.8	217.9	168.9	102.5	76.4		
S12V370FL	408.1	334.7	286.3	243.4	188.8	113.2	86.0		
S12V539FL	537.7	438.4	382.7	337.8	271.0	172.5	130.8		
		1.80V PER CELL - CO	ONSTANT POWER (\	WATTS/CELL) DISCH	HARGE @ 25°C				
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min		
S12V325FL	392.4	292.3	269.0	232.7	176.4	105.2	78.4		
S12V370FL	452.1	369.2	308.6	260.6	198.3	117.7	88.1		
S12V539FL	615.4	480.8	417.8	371.3	293.0	181.3	136.8		
	1.75V PER CELL - CONSTANT POWER (WATTS/CELL) DISCHARGE @ 25°C								
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min		
S12V325FL	441.8	325.1	290.0	244.5	182.2	107.2	80.0		
S12V370FL	499.6	401.3	330.8	276.0	206.7	121.6	90.5		
S12V539FL	710.1	530.7	458.9	398.9	312.2	190.2	142.9		
	1.70V PER CELL - CONSTANT POWER (WATTS/CELL) DISCHARGE @ 25°C								
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min		
S12V325FL	480.7	348.5	305.4	257.5	189.6	109.5	81.4		
S12V370FL	547.6	430.4	348.0	290.7	214.9	124.3	92.2		
S12V539FL	785.4	577.9	499.2	430.2	332.1	197.9	148.0		
		1.67V PER CELL - CO	ONSTANT POWER (\	WATTS/CELL) DISCH	ARGE @ 25°C				
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min		
S12V325FL	527.5	376.7	324.6	267.6	196.7	112.0	83.0		
S12V370FL	600.7	457.2	370.3	304.6	223.9	127.2	94.0		
S12V539FL	852.0	630.1	539.0	454.3	344.4	203.8	152.3		
	1.60V PER CELL - CONSTANT POWER (WATTS/CELL) DISCHARGE @ 25°C								
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min		
S12V325FL	573.4	402.2	339.1	279.0	202.3	113.5	84.0		
S12V370FL	644.5	482.0	385.7	315.2	229.1	130.2	96.1		
S12V539FL	908.9	667.5	558.6	468.8	354.4	207.5	154.5		

### **Discharge Performance (Constant Current Discharge)**

	1.75V PER CELL - CONSTANT CURRENT (AMPS) DISCHARGE @ 25°C						
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min
S12V325FL	231.8	169.5	150.2	126.0	93.3	54.3	40.5
S12V370FL	262.2	209.2	171.4	142.2	105.8	61.6	45.7
S12V539FL	381.3	281.8	241.2	207.9	161.8	97.3	73.0
		1.70V PER CELL -	CONSTANT CURREN	NT (AMPS) DISCHA	RGE @ 25°C		
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min
S12V325FL	255.2	183.7	160.1	134.1	98.1	55.9	41.5
S12V370FL	290.7	226.9	182.4	151.3	111.2	63.5	47.0
S12V539FL	425.9	309.7	265.0	225.9	173.3	102.0	76.1
		1.67V PER CELL -	CONSTANT CURREN	NT (AMPS) DISCHA	RGE @ 25°C		
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min
S12V325FL	282.3	200.1	171.2	140.2	102.3	57.5	42.5
S12V370FL	321.5	242.8	195.3	159.6	116.5	65.3	48.2
S12V539FL	466.9	341.3	288.5	240.4	180.8	105.6	78.7
		1.60V PER CELL -	CONSTANT CURREN	NT (AMPS) DISCHA	RGE @ 25°C		
Model	5 min	10 min	15 min	20 min	30 min	60 min	90 min
S12V325FL	310.4	215.9	180.7	147.6	106.3	58.8	43.4
S12V370FL	348.8	258.8	205.6	166.7	120.4	67.5	49.7
S12V539FL	507.8	369.2	304.4	253.4	190.0	109.5	81.3

## **Product Description**

	CONSTRUCTION
Positive Plate	Lead-calcium grids minimize corrosion & prolong life
Negative Plate	Balanced lead-calcium grids optimize recombination efficiency
AGM Separator	Mechanically strong, low electrical resistance, micro porous glass fiber which completely absorbs the electrolyte into its structure
Terminal Post	Threaded copper alloy terminals for maximum conductivity
Venting Valve	EPDM Rubber 0.44 ~2.18 PSI resealing pressure. Releasing at 1.45~5.08 PSI.
Container	ABS - Flame Retardant Containers to UL94V-0 is standard.

	OPERATION TEMPERATURE RANGE			
Nominal	20°C ~ 25°C (68°F ~ 77°F)			
Discharge	-20°C ~ 55°C (-4°F ~ 131°F)			
Charge	$0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ (32°F $\sim 122^{\circ}\text{F}$ ) With temperature compensated charger			
Storage	-20°C ~ 55°C (-4°F ~ 131°F)			

PERFORMANCE				
Recommended Maximum Charging Current Limit	Less than 0.3C A			
Float Charging Voltage	$13.5V \sim 13.8V$ at $25^{\circ}$ C, Temp. Coefficient $-20mV/^{\circ}$ C			
Maximum AC Ripple (Charger)	±0.02v/cell			
Self-Discharge	Low self-discharge rate less than 3% / month @20°C			
Equalize Charge and Cycle Service Life Voltage	14.1 ~ 14.4V for equalize charge and 14.4 ~ 15.0V for cycle charge voltage @25°C			

#### The Energy to Challenge

Stryten Energy helps solve the world's most pressing energy challenges with a broad range of energy storage solutions and components across the Essential Power, Motive Power, Transportation, Military and Government sectors. Headquartered in Alpharetta, Georgia, we partner with some of the world's most recognized companies to meet the growing demand for reliable and sustainable energy storage capacity. Stryten powers everything from submarines to subcompacts, microgrids, warehouses, distribution centers, cars, trains and trucks. Our stored energy technologies include advanced lead, lithium and vanadium redox flow batteries, intelligent chargers and energy performance management software that keep people on the move and supply chains running.

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