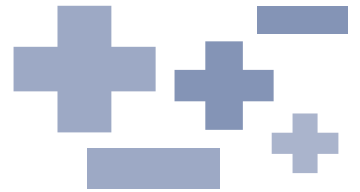




Industrial Batteries

MONOLITE
SLA



Applications and Key Benefits

- + 2V, 4V, 6V and 12V AGM top terminal blocs - 25Ah to 580Ah nominal capacity
Ideal for:
 - Telecom wireless and wireline applications
 - Industry and process controls
 - Emergency lighting systems
 - IT network operations and data centers
 - Electric utility / switchgear
- + Excellent for medium to long discharge applications (2 to 20 hours)
- + 12 year design life in float operation in temperature controlled environments
- + High energy density design allows for more efficient battery layout and footprint
- + AGM recombination technology minimizes gassing
- + No separate battery room required
- + No water additions required
- + Non-hazardous for sea/rail/road/air transportation
- + 100% Recyclable

Applicable Standards

- IEC 60896 Part 21 - VRLA methods of testing
- IEC 60896 Part 22 - VRLA requirements
- Bellcore TR-NWT-000766 - VRLA battery generic requirements
- Bellcore TR-NWT-000909 - Fiber generic requirements
- Telcordia GR-4228 - VRLA battery string certification
- UL Recognized
- UL 1778 - UPS equipment
- Eurobat "Long Life" - 12 years and longer
- BS 6290 Part 4 - specifications for VRLA classification
- BS 6334 / UL 94 V0 / IEC 707 FV0 - determination of materials flammability

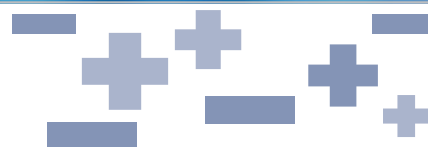
FIAMM Manufacturing

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System

Technical Features

- **Plates:** extra thick plates with grids cast from high quality lead-tin-calcium alloy to ensure long reliable life and low gas emission
- **Separators:** microporous absorbed glass mat (AGM) facilitates recombination and immobilizes the electrolyte
- **Container and Cover:** made from thick walled flame retardant ABS plastic and designed for unsurpassed mechanical strength. The case and cover has an LOI greater than 28% and meets the flame retardant standards of UL 94 V-O.
Thermally welded case to cover sealing eliminates leaks.
- **Flame Arrestors / Safety Valves:** designed to open at 5 PSI and close at 3 PSI, the vent allows excess gas to escape when overcharging.
The flame arrestor prevents any errant sparks or flames from entering the battery.
- **Terminals:** threaded terminal posts with brass inserts provide high conductivity, retain required torque values and allow for easy installation.
- **Post Seals:** the high integrity post seal design prevents electrolyte leakage over a wide temperature range
- **Internal Connections:** heavy duty internal straps and through-the-partition cell connections minimize internal resistance and increase energy density
- **Handles:** to facilitate ease of handling, installation and removal of the batteries
- **Shelf life:** < 2% self-discharge per month at 77°F allows 6 months shelf life before boosting is required





FIAMM SLA range

Model	Nominal Voltage (V)	Capacity (Ah) at 77°F	Short Circuit Current (A)	Internal Resistance (mOhm)	Dimensions (in)			Weight (lbs)	Terminal Type
		8 hrs to 1.75 Vpc	IEC 60896 21-22	IEC 60896 21-22	Length	Width	Height		
12 SLA 25	12	25	1150	11.0	8.58	5.08	6.53	24.2	Male M8
12 SLA 30	12	30	1300	9.0	7.91	5.43	7.48	30.8	Male M8
12 SLA 50	12	50	2030	6.0	11.34	6.81	7.95	48.4	Female M8
12 SLA 75	12	75	3000	4.0	14.17	6.46	8.98	70.4	Female M8
12 SLA 80	12	80	3000	4.0	14.17	6.46	8.98	66.5	Female M8
6 SLA 100	6	100	3800	1.70	10.67	6.81	7.95	46.2	Female M8
6 SLA 125	6	125	4300	1.40	10.55	6.77	9.06	57.2	Female M8
4 SLA 150	4	150	5000	0.70	10.67	6.81	7.95	44.0	Female M8
6 SLA 160	6	160	3050	1.96	11.73	7.95	8.90	74.8	Female M8
6 SLA 180*	6	180	3400	1.75	15.28	6.81	9.29	77.2	Female M8
4 SLA 200	4	200	3800	1.00	9.84	7.95	8.90	57.2	Female M8
2 SLA 250	2	250	5900	0.35	10.67	6.81	7.95	39.6	Female M8
2 SLA 300	2	300	6300	0.32	10.67	6.81	7.95	44.0	Female M8
2 SLA 405/4*	2	405	7600	0.26	9.84	7.95	8.90	57.2	Female M8
2 SLA 500*	2	500	9700	0.21	15.28	6.81	9.29	81.4	Female M8
2 SLA 580*	2	580	10800	0.19	15.28	6.81	9.29	90.2	Female M8

* The front view is the short side

Torque Settings

- + Male M8: 65-70 inlbs (7.3-8 Nm)
- + Female M8: 88-106 inlbs (10-12 Nm)

Electrical Characteristics

- + FLOAT VOLTAGE CHARGE AT 77°F: 2.26 Vpc
- + TEMPERATURE COMPENSATION: -1.38 mV/°F
- + SELF-DISCHARGE AT 77°F: < 2% / month

FIAMM Energy LLC
1 FIAMM Way
Waynesboro, GA 30830
www.fiamm.com
email:info.standby.america@fiamm.com



Industrial Batteries



Model	Constant Current Discharge Rates Amperes to 1.67 Vpc at 77°F (25°C)														
	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 25	117	87.3	61.0	47.0	38.7	29.0	21.3	16.8	9.51	6.83	5.43	4.54	3.14	2.59	1.37
12 SLA 30	139	104	72.6	56.0	46.1	34.6	25.5	20.2	11.4	8.20	6.52	5.45	3.76	3.10	1.64
12 SLA 50	231	173	121	93.3	76.9	57.6	42.5	33.7	19.0	13.7	10.9	9.08	6.27	5.17	2.74
12 SLA 75	347	260	182	140	115	86.4	63.8	50.5	28.5	20.5	16.3	13.6	9.41	7.76	4.10
12 SLA 80	355	266	186	143	118	88.5	65.3	51.7	29.2	21.0	16.9	14.1	10.0	8.28	4.38
6 SLA 100	463	346	242	187	154	115	85.0	67.4	38.0	27.3	21.7	18.2	12.5	10.3	5.47
6 SLA 125	348	305	251	205	176	134	103	83.2	47.5	34.2	27.2	22.7	15.7	12.9	6.84
4 SLA 150	630	494	357	280	230	173	128	102	57.5	41.6	33.0	27.6	19.1	15.7	8.32
6 SLA 160	566	486	369	273	229	177	135	109	64.4	46.2	36.4	30.2	20.6	17.1	8.94
6 SLA 180	501	440	362	296	254	194	148	120	68.3	49.2	39.1	32.7	22.7	18.9	9.85
4 SLA 200	573	510	430	362	304	228	169	138	80.5	57.8	45.4	37.7	25.7	21.4	11.2
2 SLA 250	851	679	529	430	368	283	212	168	94.5	68.7	55.4	46.5	31.5	25.8	13.9
2 SLA 300	885	738	603	498	427	332	253	201	114	82.4	66.4	55.8	37.8	31.0	16.7
2 SLA 405/4	896	761	656	584	525	415	310	251	148	109	86.9	72.6	49.3	41.1	21.8
2 SLA 500	1506	1264	1009	832	701	536	404	327	190	137	109	90.8	62.7	51.7	27.4
2 SLA 580	1649	1405	1152	956	811	624	476	384	220	159	126	105	72.8	60.0	31.7

Model	Constant Current Discharge Rates Amperes to 1.75 Vpc at 77°F (25°C)														
	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 25	101	78.0	56.0	44.0	36.5	27.5	20.6	16.3	9.32	6.77	5.39	4.51	3.12	2.56	1.35
12 SLA 30	120	92.7	66.6	52.4	43.5	32.8	24.6	19.6	11.2	8.12	6.47	5.41	3.74	3.08	1.63
12 SLA 50	202	155	111	87.3	72.4	54.7	41.0	32.6	18.5	13.5	10.8	9.02	6.23	5.13	2.71
12 SLA 75	303	232	166	131	109	82.0	61.5	48.9	27.8	20.3	16.2	13.5	9.35	7.69	4.07
12 SLA 80	310	237	170	134	111	83.9	62.9	50.1	28.5	20.8	16.7	14.0	9.98	8.21	4.34
6 SLA 100	404	309	222	175	145	109	82.0	65.2	37.1	27.1	21.6	18.0	12.5	10.3	5.42
6 SLA 125	301	259	216	186	162	126	97.9	80.3	46.6	33.8	26.9	22.6	15.6	12.8	6.78
4 SLA 150	546	439	326	262	218	164	123	98.3	56.5	41.1	32.7	27.4	18.9	15.6	8.24
6 SLA 160	524	445	330	255	215	169	130	106	62.9	45.0	35.4	29.4	20.1	16.7	8.78
6 SLA 180	433	373	311	268	233	182	141	116	67.1	48.7	38.8	32.5	22.6	18.7	9.76
4 SLA 200	513	465	393	330	278	215	162	131	78.6	56.3	44.2	36.8	25.1	20.9	11.0
2 SLA 250	705	586	473	393	342	265	201	161	92.9	67.8	54.7	46.0	31.2	25.6	13.8
2 SLA 300	759	642	528	454	399	315	240	193	112	81.3	65.7	55.2	37.5	30.7	16.6
2 SLA 405/4	763	695	616	551	496	394	296	241	145	108	86.1	71.9	49.1	40.8	21.7
2 SLA 500	1332	1090	882	752	650	506	387	317	186	135	108	90.2	62.3	51.3	27.1
2 SLA 580	1396	1208	999	863	745	585	456	373	216	157	125	105	72.3	59.5	31.5

Model	Constant Current Discharge Rates Amperes to 1.81 Vpc at 77°F (25°C)														
	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 25	88.5	68.8	51.0	40.9	34.1	25.6	19.4	15.6	9.04	6.63	5.30	4.45	3.07	2.53	1.33
12 SLA 30	102	80.3	59.7	47.8	39.9	30.9	23.3	18.7	10.9	7.96	6.36	5.34	3.69	3.03	1.60
12 SLA 50	169	133	99.7	80.2	66.8	51.7	39.0	31.2	17.9	13.3	10.6	8.89	6.14	5.05	2.67
12 SLA 75	254	200	150	120	100	77.5	58.4	46.7	26.9	19.9	15.9	13.3	9.22	7.58	4.01
12 SLA 80	260	205	153	123	103	79.4	59.8	47.9	27.5	20.4	16.4	13.8	9.73	8.08	4.27
6 SLA 100	339	267	199	160	134	103	77.9	62.3	35.8	26.5	21.2	17.8	12.3	10.1	5.34
6 SLA 125	260	220	187	163	143	116	92.2	76.9	45.2	33.2	26.5	22.2	15.4	12.6	6.68
4 SLA 150	463	378	291	239	200	154	117	93.9	54.7	40.2	32.1	26.9	18.6	15.2	8.09
6 SLA 160	444	372	287	234	200	160	123	100	60.9	43.7	34.4	28.5	19.3	16.1	8.55
6 SLA 180	374	317	269	235	206	167	133	111	65.1	47.7	38.2	32.0	22.3	18.4	9.62
4 SLA 200	441	409	358	300	253	198	152	125	75.3	54.1	42.7	35.5	24.2	20.2	10.7
2 SLA 250	550	472	397	342	302	243	183	151	90.0	66.3	53.5	45.0	30.7	25.3	13.5
2 SLA 300	645	558	467	404	359	287	221	180	109	79.9	64.6	54.3	36.9	30.3	16.3
2 SLA 405/4	673	620	558	496	445	356	278	230	141	105	84.5	70.9	48.3	40.3	21.4
2 SLA 500	1082	905	773	667	587	469	367	303	181	133	106	88.9	61.4	50.5	26.7
2 SLA 580	1190	1011	867	757	668	546	428	354	210	154	123	103	71.3	58.6	31.0



Model	Constant Power Discharge Rates Watt per cell to 1.67 Vpc at 77°F (25°C)														
	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 25	202	154	110	85.7	71.1	53.6	39.7	31.4	17.9	13.0	10.4	8.72	6.03	4.95	2.62
12 SLA 30	240	184	131	102	84.7	64.0	47.5	37.7	21.4	15.6	12.5	10.5	7.23	5.94	3.14
12 SLA 50	396	303	216	168	140	105	78.3	62.4	35.6	26.1	20.8	17.5	12.1	9.92	5.25
12 SLA 75	594	455	324	253	209	158	117	93.6	53.4	39.1	31.3	26.2	18.1	14.9	7.88
12 SLA 80	608	466	332	259	214	162	120	95.8	54.7	40.1	32.3	27.1	19.1	15.9	8.40
6 SLA 100	792	606	432	337	279	211	157	125	71.2	52.2	41.7	35.0	24.2	19.8	10.5
6 SLA 125	601	533	444	367	317	244	188	153	88.8	65.1	52.0	43.6	30.2	24.8	13.1
4 SLA 150	1069	857	632	501	415	315	234	187	107	78.2	62.5	52.4	36.2	29.8	15.8
6 SLA 160	931	772	594	490	416	326	250	204	121	86.9	68.4	56.9	38.8	32.2	16.9
6 SLA 180	865	767	640	528	457	351	270	220	128	93.7	74.9	62.8	43.8	36.2	18.9
4 SLA 200	997	895	765	650	551	417	311	255	151	108	85.4	71.0	48.5	40.3	21.1
2 SLA 250	1456	1186	941	774	667	519	392	312	177	130	105	88.4	60.2	49.4	26.6
2 SLA 300	1519	1289	1069	893	772	607	466	373	213	156	126	106	72.2	59.3	32.0
2 SLA 405/4	1588	1362	1183	1060	956	762	574	466	276	208	166	139	94.9	79.1	42.1
2 SLA 500	2657	2254	1822	1515	1284	989	750	609	356	260	208	174	121	99.0	52.4
2 SLA 580	2903	2500	2073	1735	1481	1148	882	715	413	301	241	202	140	115	60.8

Model	Constant Power Discharge Rates Watt per cell to 1.75 Vpc at 77°F (25°C)														
	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 25	180	142	103	82.0	68.4	51.9	39.0	31.0	17.9	13.0	10.4	8.72	6.03	4.95	2.62
12 SLA 30	215	169	123	97.7	81.6	61.9	46.7	37.3	21.4	15.6	12.5	10.5	7.23	5.94	3.14
12 SLA 50	358	278	203	161	135	102	77.1	61.6	35.4	26.0	20.8	17.5	12.1	9.91	5.24
12 SLA 75	536	418	305	242	202	153	116	92.5	53.1	39.1	31.2	26.2	18.1	14.9	7.87
12 SLA 80	549	428	312	248	207	157	118	94.7	54.4	40.0	32.3	27.1	19.1	15.9	8.39
6 SLA 100	715	557	406	322	269	204	154	123	70.8	52.1	41.6	34.9	24.1	19.8	10.5
6 SLA 125	537	467	392	340	298	234	183	151	88.7	65.0	51.9	43.6	30.1	24.7	13.1
4 SLA 150	960	784	593	480	402	305	231	185	107	78.1	62.4	52.3	36.2	29.7	15.7
6 SLA 160	795	697	557	469	405	315	247	202	120	86.3	67.9	56.5	38.5	32.1	16.9
6 SLA 180	773	672	565	490	429	337	263	218	128	93.6	74.8	62.8	43.7	36.1	18.9
4 SLA 200	919	840	717	608	515	402	305	248	150	108	84.8	70.6	48.1	40.1	21.1
2 SLA 250	1253	1057	865	724	634	496	379	305	177	130	105	88.4	60.2	49.4	26.6
2 SLA 300	1351	1157	964	835	738	589	452	364	213	156	126	106	72.2	59.3	32.0
2 SLA 405/4	1393	1277	1137	1023	923	739	559	457	276	208	166	139	94.9	79.1	42.1
2 SLA 500	2418	2001	1635	1403	1218	953	733	603	356	260	208	174	121	99.0	52.4
2 SLA 580	2537	2213	1847	1604	1392	1100	862	707	413	301	241	202	140	115	60.8

Model	Constant Power Discharge Rates Watt per cell to 1.81 Vpc at 77°F (25°C)														
	Minutes								Hours						
	1	5	10	15	20	30	45	60	2	3	4	5	8	10	20
12 SLA 25	162	128	96.1	77.6	65.1	49.1	37.4	30.1	17.6	12.9	10.3	8.67	6.00	4.93	2.61
12 SLA 30	188	149	113	90.7	76.2	59.3	45.0	36.2	21.1	15.5	12.4	10.4	7.20	5.92	3.13
12 SLA 50	308	246	186	151	127	98.5	74.6	60.0	34.8	25.8	20.7	17.4	12.0	9.87	5.22
12 SLA 75	462	370	280	227	190	148	112	90.0	52.2	38.7	31.0	26.0	18.0	14.8	7.83
12 SLA 80	474	379	286	232	194	151	115	92.1	53.4	39.7	32.1	26.9	19.0	15.8	8.35
6 SLA 100	617	493	373	302	253	197	149	120	69.6	51.7	41.3	34.7	24.0	19.7	10.4
6 SLA 125	476	407	348	306	269	220	176	147	87.5	64.4	51.6	43.3	30.0	24.6	13.0
4 SLA 150	838	693	541	447	376	292	222	180	105	77.4	61.9	52.0	36.0	29.6	15.7
6 SLA 160	692	611	512	437	381	306	239	194	118	85.0	66.9	55.5	37.7	31.5	16.7
6 SLA 180	686	586	501	440	388	317	253	212	126	92.8	74.2	62.4	43.4	36.0	18.8
4 SLA 200	812	756	667	563	477	377	292	240	146	105	83.1	69.2	47.2	39.4	20.9
2 SLA 250	1011	877	743	644	571	462	351	290	174	129	104	87.7	59.9	49.3	26.5
2 SLA 300	1181	1032	870	759	677	546	422	347	210	155	126	106	72.0	59.1	31.8
2 SLA 405/4	1257	1162	1051	939	845	679	534	442	273	205	164	138	94.3	78.6	41.8
2 SLA 500	2018	1701	1461	1267	1119	899	707	585	351	258	206	173	120	98.6	52.2
2 SLA 580	2215	1898	1637	1436	1271	1045	823	682	407	299	239	201	139	114	60.5