









Sealed Lead-Acid Batteries



AGM & GEL





















Features & Benefits

Our Universal line of AGM and GEL batteries are defined as Non Hazardous & Non-Spillable by DOT (Department of Transportation), IATA (International Airline Transport Association), and ICAO (International Civil Aviation Organization).

Our SLA batteries offer:

- Outstanding performance, withstanding high current output and deep cycling.
- Excellent resistance to vibration, shock, chemicals and heat.
- Lower self-discharge.
- Exceptional leak resistance even in an upside-down position.
- Reliable power for critical applications.
- ODOT 60 classified for easy transportation.
- UL recognized.



AGM & GEL Battery Design

AGM & GEL batteries are lead-acid and of the same battery chemistry (lead dioxide, sponge-lead and sulfuric acid electrolyte) but the electrolyte is stabilized differently.





The electrolyte is suspended in fiberglass mat separators which act as absorbent sponges.





The electrolyte is suspended in silica-based gel as a thick pasty material.



Sealed Lead-Acid/AGM

			Nom	Capacity				nsions			Weight	Case	Skid
UPG No.	Model No.	Terminal	Volt	20 hr. rate	Len in.	gth mm	Wic in.	dth mm	Heig in.	ght mm	1bs. +/-5%	Qty	Qty
 40559	UB445	F2	4	4.50	1.86	47	2.06	52	3.82	97	1.10	20	1920
D5798	UB490	F2 F2 F1	4	9.00	4.02	102	1.74	44	3.91	99	2.10	5	500
10561	UB610	ĖΓ	6	1.00	2.01	51	1.65	42	2.20	56	0.53	20	2240
D5731	UB613	FÍ	6	1.30	3.82	5 I 97	0.96	24	2.22	56	0.64	60	3780
05695	UB3.2-6	FĴ	6	3.20	2.57	65	1.28	24 33	4.00	102	1.10	30	1920
10681	UB632L	FJ.	6	3.20	5.26	140	1.33	32	2.37	58	1.40	20	960
D5732	UB634	FI	6	3.40	5.25	133	1.32	33	2.57	65	1.10	20	1700
05733	UB645	FÍ	6	4.50	2.76	70	1.85	47	4.17	106	1.83	20	1700
10565	UB645WL	WL	6	4.50	2.75	69	1.86	47	3.94	100	2.02	10	1200
05697	UB650S Lantern	WL S2	6	5.00	2.63	67	2.63	67	4.50	114	2.02	20	1000
05897	UB650F Lantern	FΪ	6	5.00	2.63	67	2.63	67	4.00	102	2.02	20	1000
D5734	UB670	FI	6	7.00	2.63 5.94	150	1.34	34	3.94	100	2.43	10	000
D5735	UB685	FÍ	6	8.50	3.82	97	2.19	56	4.60	117	3.10	10	800
D5736 / D5778	UB6120	F1 / F2	6	12.00	5.94	151	1.94	49	3.82	97	4.06	10	650
10575	UB6130 TOY	FI	6	13.00	4.25	108	2.82	72 71	5.44	138	5.04	10	50
05737	UB6120 TOY	P2	6	12.00	4.25	108	2.78	71	5.47	139	4.19	10	50
0560	UB6420	F2	6	42.00	6.42	i63	3.48	88	6.41	163	13.20	2	144
15969	UB62000 (Grp 27 Ca	F2 ise) I4 L5	6	200.00	12.00	305	6.60	168	9.25	235	58.20	ī	42
15966	UB-GC2 (Golf Cart)	L5	6	200.00	0.26	260	7.12	180	9.67	245 62 58	62.30		42 50
1579 I	UB1208	WL	12	0.80	3.78	96	0.98	25	2.44	62	0.75	30	1000
D5738	UBI2I3	F)	iŽ	1.30	3.82	97	1.69	43	2.28	58	1.21	20	2000
02790	ÜB1220-T	ŠŤ	12	2.00	5.91	150	0.79	20	3.50	89	1.54	20	1200
5739	UB1222	FI	12	2 20	7.00	178	1.38	35	2.50	63	2.20	20	1400
V/A	UB1222 UB1223A	PC	2	2.20 2.30	7.17	182	0.93	24	2.40	61	1.46	10	500
5700	I IR I 229T	FÏ		2.50	3.06	78	2.19	24 56	4.00	102		iŏ	960
D5740	UB1229T UB1234	FÍ	12 12	2.90 3.40	5.25	133	2.63	67	2.44	62	2.12 3.20	10	800
05741 / D5777	UB1250	FI / F2	2	5.00	3.54	90	2.76	70	4.21	107	3.09	iö	850
10800	UB1270	FI	12	7.00	5.94	151	2.56	65	3.94	100	4.50	8	360
10760	UB 1272	Fi	i 2	7.20	5.94	151	2.56	65	3.94	100	4.90	8	504
D5743 / D5779	LIB 1280	F1 / F2	12	8.00	5.94	151	2.56	65	3.94	100	4.96	8	544
10749 / 40748	ÜB1290/ UB1290F2 UB12100-S	FI	i2	9.00	5.94	151	2.56	65	3.94	100	5.10	8	504
05719	LIB12100-S	F2	12	10.00	5.94	151	2.56	65	4.61	117	7.28	<u>8</u>	504
D5744 / D5775	UB12120	F1 / F2	2	12.00	5.94	- 151	3.88	99	4.00	102	8.38		336
10658	UB12150	Tab w/ hole	12	15.00	5.94	151	3.89	99	3.95	100	9.60	4	244
10672	UB12150	F2		15.00	5.94	151	3.89	99	3.95	100	9.60	<u>1</u>	244
05745 / 40648	UB12180	F2 T4 / F2	12 12	18.00	7.13	181	3.01	76	6.57	167	11.90		240
10696	UB12220	T4	12	22.00	7.13	181	3.01	76	6.57	167	13.01	2	240
D5747	UB12220 UB12260	T3		26.00	6.50	165	6.86	174	4.94	125	18.08	2	168
10596	UB122260T	T3 T3	12 12	26.00	6.50	165	4.94	125	6.86	125 174	21.00	2	150
D5722	UB12350 (Group UI)	·ii	12	35.00	7.68	195	5.16	131	7.13	181	23.15		128
5976	UB12350 (Group III)	12		35.00	7.68	195	5.16	[3]	6 4	156	23.15	 	128
5977	UB12350 (Group UI) UB12500) <u>12</u> L2	12 12	50.00	7.72	196	6.50	165	6.14 7.17	182	31.97		100
15825	LIB12550 (Group 22)	VE) 71	<u> 2</u>	55.00	9.02		5.43	138	913		38.58		84
10740	UB12550 (Group 221 UB12550 (+ ON LEF	NF) ZI T) ZI	12	55.00	9.02	229 229	5.43	138	9.13 9.13	232 232	38.58		84
5980	UB12550 (Group 22)	VF) 14	12	55.00	9.02	229	5.43	138	8.27	210	38.58		84
15821	UB12750 (Group 24)		12	75.00	10.24	260	6.61	168	9.13	232	50.71		60
5822	11812750 (Group 24)	14	12	75.00	10.24	260	6.61	168	8.27	210	50.71		66
5826	UB12750 (Group 24) UB12900 (Group 27)	ŽI	12	90.00	12.05	306	6.61	168	9.13	232	56.80		52
5823	UB12900 (Group 27)	IA		90.00	12.05	306	6.61	168	8.27	210	56.80		52 52
15823	UB 121000 (Group 2/)	<u>[4</u>	12	100.00	12.05	306			9.13	232			52
	UB121000 (Group 27	7) ZI)H) FLI	1 <u>2</u> 12		12.03		6.61	138			58.90		52 47
D5751	UB121100 (Group 30 UB121100 (Group 30	(<u>[]</u>		110.00	12.91	328	6.77	172	9.29	236	67.24	!	47
15981	UB121100 (Group 30)H) <u>[6</u>	12	110.00	12.91	328	6.77	172	8.58	218	67.24		47
15824	UB121100 (Group 30		12	110.00	12.91	328	6.77	172	9.29 11.22	236	67.24		47
0994	UB121350	16	12	135.00	13.39	340	6.81	173		285	87.08		40
45965 45964	UB-4D AGM UB-8D AGM	L4	12	200.00	20.75	527 520	8.11	206	9.65	245	123.46	!	24 18
	1 1 1 2 2 1 1 A (- M	1 4	,	250.00	20.47	570	10.55	268	9.65	169	160.94		18

Adventure Power Marine / Absorbent Glass Mat (AGM)

			Nom	Capacity			Dimen	isions			Weight	Case	SKIG	
UPG No.	Model No.	Terminal	Volt	20 hr. rate	Len in.	gth mm	Wid in-	th mm	Hei	ght mm	1bs. +/-5%	Qty	Qty	
40600	UBI 2550 (Group 22NF)	Marine Post	[2	55.00	9.02	229	5 43	138	10.22	259	39.00		84	
40601	UB12750 (Group 24)	Marine Post		75.00	10.24	260	6.61	168	10.16	258	54.50	····i	66	
40602	UB12900 (Group 27)	Marine Post	12	90.00	12.05	306	6.61	168	10.16	258	64.00	J	52	
40603	UB121100 (Group 30H)	Marine Post	12	110.00	13.00	330	6.91	175	10.37	263	74.65	I	46	

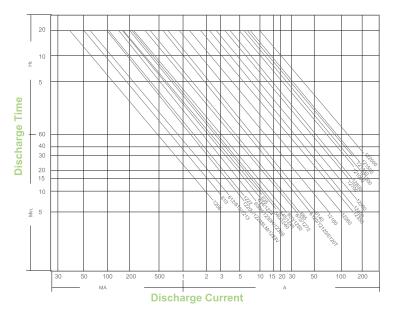
Flame Retardant Sealed Lead-Acid/Absorbent Glass Mat

			Nom	Capacity			Dimer	isions			vveignt	Case	Skid	
UPG No.	Model No.	Terminal	Volt	20 hr. rate	Len in.	gth mm	Wid in.	lth mm	He in.	ight mm	1bs. +/-5%	Qty	Qty	
45565	UBI250FR	F2	Ī2	5.00	3.54	90	2.76	70	4.21	107	3.09	10	600	
45566	UBJ270FR	F2F2	J2	7.00	5.94	[5]	2.56	64	3.94	100	4.96	88	360	
45567	UBJ2120FR	F2	J2	J2.00	5.94	[5]_	3.88	98_	4.00	102_	8.38	44	336	
45568	UBI2I80FR	T4	12	18.00	7.13	[8]	3.01	76	6.57	167	11.90	4	480	
40995	UB12260FR	Т3	12	26.00	6.54	166	6.89	175	4.92	125	18.08	2	120	
D5880	UB12350FR	LI	12	35.00	7.68	195	5.16	131	7.13	181	23.15	2	128	
D5881	UB12550FR	ZI	12	55.00	9.02	229	5.43	138	9.13	232	38.58	I	84	
D5882	UB12750FR	ŽJ	12	75.00	10.24	260	6.61	168	9.13	232	50.71	J	60	
45983	UBJ2750FR	I4	J2	75,00	10.24	260	6.6	168	8.31	2]]	50.71	J	60	
D5883	UB12900FR	ZI	12	90.00	12.05	306	6.61	168	9.13	232	59.52	1	52	
D5884	UB121100FR	ZI	12	110.00	12.91	328	6.77	172	9.29	236	67.24		47	

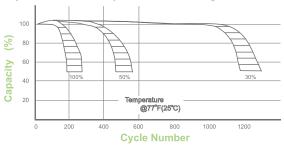
Sealed Lead-Acid/GEL

			Nom	Capacity			Dimen				Weight	Case	Skid
UPG No.	Model No.	Terminal	Volt	20 hr. rate	Len in.	gth mm	Wid in.	th mm	He in.	ight mm	1bs. +/=5%	Qty	Qty
40703	UB-GC2 (Golf Cart) Gel	L5	6	180.00	10.26	260	7.12	180	9.67	245	63.20	I	20
D5870	UI GEL	LI	12	32.00	7.69	195	5.19	132	7.00	178	23.10	l l	128
D5871	UB-22NF GEL	ZI	12	55.00	9.02	229	5.38	137	9.13	232	38.58		84
D5872	UB-24 GEL	ZJ	12	75,00	10.25	260	6.63	168	9.25	235	50,10	J	60
D5873	UB-27 GEL	ZI	12	90.00	12.05	306	6.61	168	9.13	232	59.52	I	54
D5874	UB-30H GEL	FL2	12	100.00	12.91	328	6.77	172	9.29	236	67.24		52
40701	UB-4D GEL	L4	12	180.00	20.87	530	8.11	206	9.61	244	132.28	I	24
40702	UB-8D GEL	L4	12	230.00	20.47	520	10.55	268	9.65	245	171.96	1	16

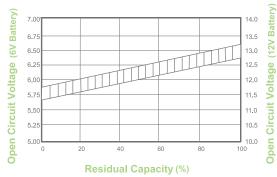
Discharge Current vs Time Curve 25°C(77°F)



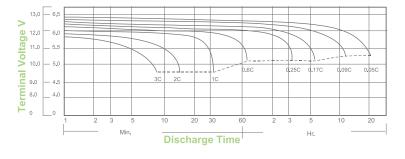
Cycle Life vs Depth of Discharge



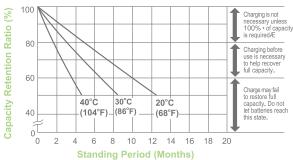
Open Circuit Voltage vs Residual Capacity



Discharge Characteristics



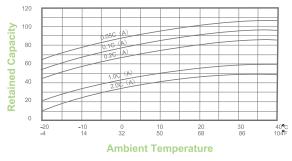
Shelf-Life & Storage Temperature



Discharge Current vs Final Discharge Voltage

Discharge Current (A)	Final Discharge Voltage (V/cell)
0.01C>CA	1.90
0.2>C _A ≥0.01C	1.75
0.5>C _A ≥0.2C	1.70
2.0>C _A ≥0.5C	1.60
C _A ≥2.0C	1.30

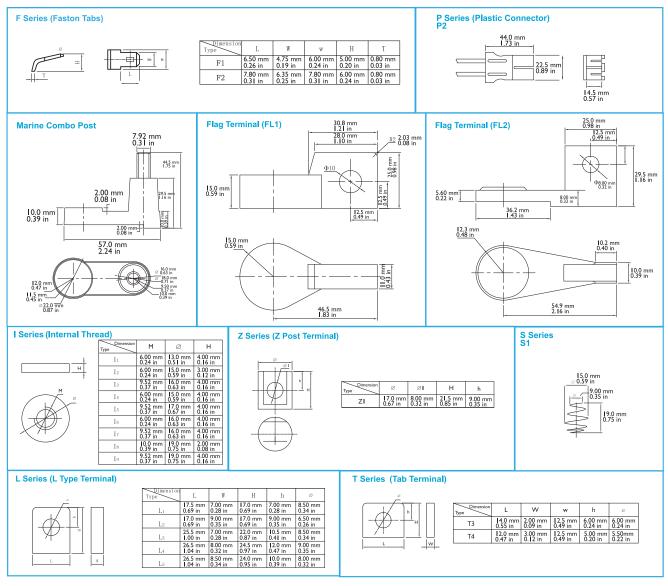
Effect of Temperature on Capacity







Terminal Configurations



Battery Care

To properly charge your deep cycle AGM/GEL battery:

- Active users: Charge daily.
- Occasional users: Charge your battery before any outing, after active use or every 90 days if no use.
- ② Only use with a specified charger. Only use appropriate charger to charge AGM vs GEL batteries as charging rates differ.
- O Never use an automotive or wet type charger on a AGM/GEL battery.
- © Top charge your battery frequently and/or leave on a charger/maintainer.

Battery Storage

- 3 Batteries should always be stored fully charged in a cool and dry place to maintain maximum service life.
- Depending on storage temperature, batteries hold their charge for 3 to 9 months until recharge is necessary. Above 30°C (86°F), recharge at 9 months. Above 40°C (104°F), recharge at 3 months. Do not store above 40°C (104°F).
- If a battery is stored for 9 months or longer without being charged, its service life may be shortened.
- Never store batteries in a sealed environment or incorporate into a sealed structure/enclosure without adequate ventilation.

Usage Precautions !

SLA batteries if used under recommended conditions generate no sulfuric acid gasses. However, because they contain lead and sulfuric acid, which are both toxic, proper care and handling is important in order to avoid accidental fires, damage to property, bodily injuries or even death.

- Improper charging and poor maintenance may cause battery to emit hydrogen gas. Therefore, do not use battery near a spark, fuse, flame and/or equipment that emits sparks.
- Never mix the SLA batteries together with other types of batteries, such as dry cells and nickel-cadmium batteries.
- •Keep the battery terminals from contact with wire, metal cabinets, metal tools, such as screw drivers, spanners, torque wrenches unless they are properly insulated. Do not wear any watches, personal jewelry, hair pins or any other metallic objects when servicing the batteries.
- Short circuiting the terminals of the battery can cause burns, injuries, damage to the storage battery, or trigger explosions.
- •Do not direct solder to terminal. This may lead to electrolyte leakage.

- Ouse of SLA batteries in the upside down position is not recommended.
- Do not use organic solvent, cleaning agents, paint/thinner, petroleum products to clean battery surface. These products can lead to battery container/cover cracking.
- SLA batteries may not be compatible with certain equipment. Any uncertainty about the specifications of the battery should be brought to our attention.
- Observe circuit polarities. Do not make or break live circuits.
- As appropriate, use an insulating blanket to cover exposed portions of the battery system when performing extended maintenance that could result in personal or equipment contact with the energized conductors.

Primary Power Applications

- Consumer Electronics
- Electric Vehicles
- Engine Starters
- Golf Cart
- Hunting
- Lawn & Garden
- Marine
- Medical Mobility
- Medical Equipment

- Motorcycles
- Photography
- Powersports
- Portable Tools
- Solar
- Toys & Hobbies
- Trucking
- Other Portable Equipment

Standby Power Applications

- Access Control Devices
- Automotive & Cable Electronics
- Emergency Lighting
- Security
- Telecommunications Equipment
- **OUPS** Systems

Specialized Applications

If your needs are specialized, we are able to custom manufacture batteries and chargers to meet your particular specifications. Tell us what you need and let us handle the rest.

Environmental Care



Improper disposal of batteries can lead to contamination of soil and ground water. At UPG, we work with authorized recyclers to pick up your "spent"/used batteries and we ensure that these batteries are properly disposed of by EPA licensed smelters.

Adventure Power® Chargers & Maintainers



UPG recommends using Adventure Power Charger & Maintainers for charging and maintaining sealed lead-acid batteries in boats, motorcycles, ATVs, snowmobiles and other vehicles. Adventure Power Charger & Maintainers conveniently and safely maintain battery charge while in storage without having to disconnect from vehicle.

UPG No.	Description	Charges and/or Maintains
84036	I2V IA Charger & Maintainer	12 V 2.9 Ah - 12 V 7.2 Ah Batteries
84037	12V 2A Charger & Maintainer	12 V 8 Ah - 12 V 12 Ah Batteries
84038	I2V 4A Charger & Maintainer	12V 12 Ah Batteries and Up

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