

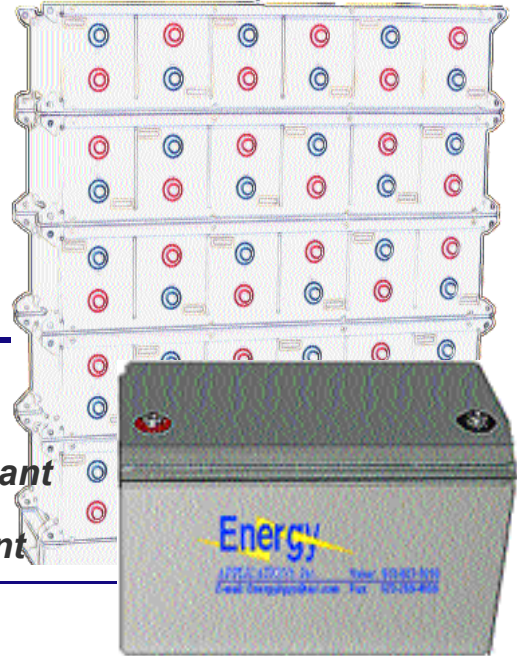


APPLICATIONS, Inc.
energyapps@aol.com

UPS High Discharge Batteries

12 Volt Valve Regulated Batteries

- Form, Fit and Function
- Heat Welded Design
- 99.9% Recombination
- UL Component
- UL 94V0 Flame Retardant
- ISO-9001 Certified Plant



UPS for Standby and Emergency Power

- › COMPUTER SYSTEMS FOR COMMERCE
- › TELECOMMUNICATIONS
- › SECURITY NETWORKS
- › SWITCHGEAR & CONTROLS
- › STANDARD PHYSICAL FIT
- › STANDARD ELECTRICAL SIZES
- › INTERCHANGEABLE
- › 12 VOLT BLOCKS

Technical Specifications

Battery Type / Technology	12 Volt Batteries, Absorbent Glass Mat (AGM) type
Nominal Ratings	100 to 475 Watts per Cell to 1.67 v/c for 15 Minutes
Operating Temperature	0° to 113°F (-20 to 45C)
Storage Temperature	Temperature effects self discharge
Storage Time	6 months @ 70F prior to refreshing charge
Self Discharge	0.5 - 0.8% per week, @ 70F
Terminal Type	All Models - M6, Threaded copper Insert, hex bolt
Case Material	ABS, Flame Retardant
Flame Retardation	UL 94V0, complies with UL1778 requirements
Air Transport	Complies to IATA/CAO provision A67
Surface Transport	Non Hazardous, DOT-CFR title 49, 171-189
Charging Method	Constant voltage, current limited, float service
Maximum Charge Current	0.2C - (0.2 x rated capacity in AH)
Maximum AC Ripple	Less than 1% RMS (3.5% P-P)
Max Discharge Rate (5 seconds)	5C (5 x Rated Capacity)
Temperature Compensation	Adjust -0.018 V per °C
Float Charge Voltage, battery	13.38 - 13.50
Float Charge Voltage, per cell	2.23-2.25

Product Features

UPS High Discharge Rates

The UPS batteries are rated in watts per cell, for easy comparison to competitive models and selection for kilowatt battery requirements.

ABS Plastic Welded Case

High impact resistant material for good transport and handling . Most models are heat welded seals, with multiple pour epoxy post seals.

Flame Retardant UL94VO

Flame retardant ABS for UL 1778 and NFPA requirements.

Maintenance Free Design

Over 99% oxygen recombination with no electrolyte service required.

UL Recognized Component

Interchangeable with other batteries in performance and safety.

Quality - ISO-9001

Modern and fully automated battery making, forming and test equipment.

Technical data are subject to change without notice. Please confirm important details with the technical department.

Model 12V - 100W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	243	191	143	112	70	52	42
1.65	236	182	140	110	70	51	41
1.67	234	179	138	100	69	51	42
1.70	230	176	135	107	68	50	40
1.75	210	158	127	100	66	49	39

Model 12V - 120W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	291	229	172	134	84	62	51
1.65	283	218	168	132	84	62	49
1.67	281	215	165	120	83	61	50
1.70	276	212	163	128	81	60	48
1.75	253	190	152	120	79	58	46

Model 12V - 140W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	340	267	200	157	98	73	59
1.65	330	254	196	154	97	72	57
1.67	328	251	193	140	97	71	58
1.70	322	247	190	149	95	70	56
1.75	295	222	178	140	92	68	54

Model 12V - 170W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	358	281	211	165	104	77	62
1.65	348	268	206	200	103	76	61
1.67	346	264	203	172	102	75	62
1.70	339	260	200	157	100	74	59
1.75	311	234	187	148	97	72	57

Model 12V - 200W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	441	346	260	203	127	94	77
1.65	428	330	254	200	126	93	75
1.67	425	325	250	212	126	92	76
1.70	418	320	246	194	123	91	73
1.75	382	287	230	182	119	88	70

Model 12V - 250W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	528	469	331	256	161	123	101
1.65	517	445	326	252	158	122	98
1.67	512	442	322	250	155	120	97
1.70	505	424	319	246	152	118	96
1.75	461	396	297	236	145	116	94

Model 12V - 370W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	754	700	483	376	241	181	146
1.65	756	663	477	372	236	178	141
1.67	750	600	460	370	240	180	146
1.70	738	620	465	366	229	174	137
1.75	673	577	435	345	199	172	135

Model 12V - 475W (rated w/c 15 min to 1.67 v/c)
Watts per Cell - Various End Voltges (77 / 25°)

End Volts	1 min	5 min	10 min	15 min	30 min	45 min	60 min
1.60	858	780	590	485	310	232	185
1.65	831	755	575	480	308	230	182
1.67	826	751	571	475	300	225	180
1.70	798	725	555	460	302	223	178
1.75	754	685	515	430	300	220	175

Temperature		Multiplier		
F	C	< 1 Hr		> 1 Hr
104	40	1.04		1.06
86	30	1.01		1.02
77	25	1.00		1.00
68	20	0.95		0.97
50	10	0.88		0.90
40	4	0.83		0.84
32	0	0.76		0.77
14	-10	0.58		0.60
0	-18	0.43		0.45
-4	-20	0.38		0.40
-10	-23	0.30		0.32
-20	-29	0.20		0.22

Temperature Derating

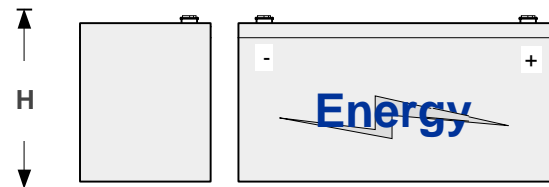
The above multipliers can be used to reduce table data performance values, or use the inverse of the multiplier to increase the load prior to selecting from the data tables.

Complex calculations should be reviewed by your local representative.

**UPS High Rate Batteries
Dimensions - 12 Volt Blocks**

Dimensional Data		Inches		
Model	Lbs.	L	W	H
12V100W	29	7.8	6.4	5.6
12V120W	30	7.7	5.1	7.1
12V140W	44	9.3	5.2	9.3
12V170W	44	9.3	5.2	9.3
12V200W	44	9.3	5.2	9.3
12V250W	64	10.2	6.5	9.3
12V370W	84	13.1	6.9	9.4
12V475W	102	13.7	6.8	11.3

Dimensional Data		Millimeters		
Model	Kg	L	W	H
12V100W	13	197	163	143
12V120W	13	195	130	180
12V140W	17	236	132	235
12V170W	18	230	130	210
12V200W	20	236	132	235
12V250W	29	258	166	235
12V370W	38	332	174	239
12V475W	46	347	173	287



ALL TERMINALS ARE M 6 BOLT SIZE, COPPER INSERTS
ALTERNATE FLAG TERMINALS ARE AVAILABLE.

Contact your local sales representative or distributor:



Energy Applications, Inc.
384 Rutherford Avenue,
Franklin, N.J. 07461
Tel: 973-827-1010
Fax: 973-209-4666
energyapps@aol.com