



an EnerSys company

AlphaCell® XTV

Extreme Temperature Batteries for
Broadband, Traffic and Security Applications



The AlphaCell XTV Battery line is specifically designed for extreme outdoor temperature applications. Its virgin lead-alloy grids minimize corrosion and maximize life expectancy.

Patented Computerized Charge/Discharge System (CCDS) provides 100% out-of-box runtime capacity. Strategic global manufacturing and distribution locations available with non-spillable transportation ratings. Optimized for remote advanced status monitoring.

- Extreme temperature Absorbed Glass Mat (AGM) technology
- Significant cold temperature performance improvement over gel
- Longer runtimes help increase network reliability
- Multiple models provide options for all network architectures
- Power density gains allow more runtime from smaller sized battery
- Extended service life for non-temperature controlled outdoor enclosures
- Full 4 year replacement warranty

General	100XTV	150XTV	195XTV	240XTV
Operating Temperature Range (w/ Temperature Compensation):	-40 to 60°C / -40 to 140°F (Charger temperature compensation @ ±3.3mVpc per °C)			
Storage Temperature:	-10 to 40°C / 14 to 104°F	-10 to 40°C / 14 to 104°F	-10 to 40°C / 14 to 104°F	-10 to 40°C / 14 to 104°F
Self Discharge:	Battery can be stored up to 12 months at 25°C / 77°F. Higher temperatures during storage will require more frequent recharge.			
Voltage Per Unit:	12V	12V	12V	12V
Float Charge Voltage:	13.5 to 13.8VDC average per 12V unit at 25°C / 77°F			
Refresh/Boost Charging Voltage:	14.4 to 15.0VDC average 12V unit at 25°C / 77°F			
Maximum AC Ripple (Charger):	0.5% RMS or 1.5% of float recommended for best results. Maximum voltage allowed = 4% P/P			
Terminal Type:	Threaded alloy insert terminal to accept M6 x 12mm bolt		Threaded alloy insert terminal to accept M6 x 20mm bolt	
Terminal Hardware Torque:	13.6NM / 120in-lbs	13.6NM / 120in-lbs	13.6NM / 120in-lbs	13.6NM / 120in-lbs
Case Sizes:	22NF	24	27	31
Dimensions H x L x W (in/mm):	8.17 x 9.01 x 5.46 / 207 x 228 x 138	8.44 x 10.85 x 6.65 / 214 x 275 x 168	8.43 x 12.71 x 6.67 / 214 x 322 x 169	8.57 x 13.50 x 6.71 / 217 x 343 x 170
Weight Approximate (lbs/kg):	39 / 17.7	56 / 25.4	67 / 30.5	75 / 32

Battery	100XTV	150XTV	195XTV	240XTV
Runtime Rating 25A (@ 25°C / 77°F to 1.75Vpc):	100 minutes	150 minutes	195 minutes	240 minutes
Amp Hour Capacity 20Hr Rate (@ 25°C / 77°F to 1.75Vpc):	56Ah	80Ah	100Ah	112Ah
Maximum Discharge Current:	300A	800A	800A	850A
Short Circuit Current:	1450A	1900A	2250A	2650A
Impedance 60Hz (Approximate):	0.005Ω	0.0045Ω	0.0039Ω	0.0034Ω
Conductance Range Fully Charged New Battery (@ 25°C / 77°F):	700 to 800	900 to 1100	1050 to 1250	1250 to 1550

Note: Terminal hardware included with every battery.

Constant Current Nominal Ratings in Amps (@ 25°C / 77°F to 1.75V per Cell)										
Discharge Time (Hours)	1	2	3	4	5	6	8	10	12	20
100XTV:	39.4	22.1	15.8	12.4	10.3	8.7	6.7	5.4	4.6	2.8
150XTV:	53.0	30.6	21.6	16.8	13.9	11.9	9.3	7.7	6.5	4.0
195XTV:	65.5	37.6	26.9	21.0	17.3	14.7	11.3	9.4	7.9	5.0
240XTV:	81.7	45.5	32.1	25.0	19.8	16.6	13.0	10.5	9.0	5.6

Estimated Runtime Minutes Using XM3-918HP (Deduct 4 to 6% for Legacy XM Power Supplies)																
90VAC @	4A				6A				8A				10A			
Models:	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV
3 Batteries:	280	401	506	581	183	262	335	389	133	190	245	289	101	146	190	228
6 Batteries:	597	869	1083	1240	402	579	726	830	298	427	538	617	232	332	421	485
9 Batteries:	914	1349	1673	1927	621	905	1128	1292	465	672	841	961	366	527	662	757
90VAC @	12A				14A				16A				18A			
Models:	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV
3 Batteries:	81	117	153	188	66	96	127	158	55	81	108	136	47	69	92	118
6 Batteries:	188	269	344	399	157	224	288	336	133	191	246	290	113	163	211	251
9 Batteries:	300	430	542	621	252	360	456	524	215	307	391	451	185	264	337	391

Estimated Runtime Minutes Using XM3-624HP (Deduct 4 to 6% for Legacy XM, VMX, and GMX Power Supplies)																
60VAC @	4A				6A				8A				10A			
Models:	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV
3 Batteries:	416	599	751	858	276	396	500	574	203	290	369	427	157	224	288	336
6 Batteries:	869	1280	1588	1828	590	858	1070	1225	441	637	797	912	347	499	627	717
9 Batteries:	1321	1941	2441	2832	904	1333	1653	1904	681	995	1237	1419	539	783	977	1118
60VAC @	12A				14A				16A				18A			
Models:	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV	100XTV	150XTV	195XTV	240XTV
3 Batteries:	126	181	234	276	104	150	195	233	87	127	166	201	74	108	142	175
6 Batteries:	284	407	513	589	238	340	431	497	203	291	370	428	174	249	319	371
9 Batteries:	444	661	803	918	375	539	677	774	322	432	582	667	278	398	503	577

Based on .92 cable plant factor @ 25°C / 77°F