

# Power

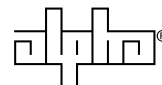
## AlphaCell™ OPzV

Gel Lead Acid Battery



- Power range available:
  - 2 volts from 200 – 3,000Ah
- Modular unit structure allows for minimal footprint
- Wide temperature range from -10°C – + 45°C
- Rugged flame retardant ABS casing to UL94-VO
- Tubular positive plate design
- 20 year design life
- 3 year - 100% full warranty

The AlphaCell OPzV battery with the combination of Gel and Tubular technologies is designed specifically for telecommunication applications. The OPzV, with its absorbed electrolyte technology is the most reliable, versatile and cost effective valve regulated battery available on the market today. This long float life and high cycle battery is available in 2 volts ranging from 200 to 3,000 amp-hours. The OPzV requires less space than conventional VRLA batteries and are structurally arranged to eliminate dislodging and slippage caused by vibrations over time.



## AlphaCell OPzV Feature Summary

### AlphaCell OPzV 2 Volt

Standard Warranty:	3 yr full/17 yr prorated
Battery Type:	Valve regulated lead acid
Range of Capacity:	200Ah – 3000Ah
Recommended Float Voltage:	2.25VPC @25°C (77°F)
Operating Temperature:	25°C (77°F)
Terminal Type:	Threaded Copper Insert
Positive Electrode:	Round-grid plate with circular bars available with low antimony or lead calcium plates.
Negative Electrode:	Flat plate with long life expander and available with low antimony or lead calcium plates.
Separation:	Microporous separator
Electrolyte:	Sulfuric acid of 1.24 ± 0.01 kg/l at 20°C
Container:	High impact, transparent SAN
Lid:	SAN in dark grey color

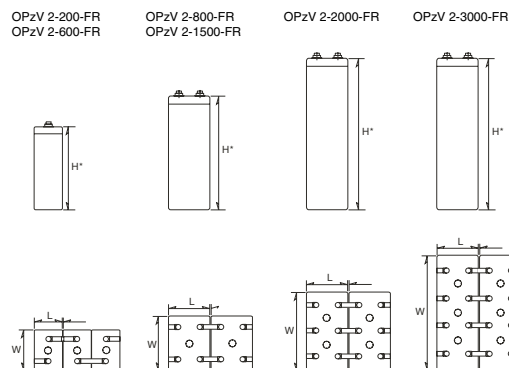
### Operational Data

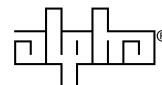
#### Alpha OPzV 2 Volt

Water refilling interval:	More than 3 years at 20°C
IEC 896-1 Cycles:	1000 cycles
Self-discharge:	Approx. 3% per month at 20°C
Operational Temperature:	-20°C to 55°C, recommended -10°C to 30°C
Ventilation Requirement:	f1=0,5 (low-antimony alloy) according VDE 0510 part 2
Measurements According:	DIN 40 737 part 3
Tests According:	IEC 896-1
Applicable Standards:	VDE 0510, part 2
Transport:	No dangerous goods during road transport

### Mechanical Specifications

Type	Length (in/mm)	Width (in/mm)	Height (in/mm)	Weight (lb/kg)	Hole Size
OPzV 2-200-FR	4.1/103	8.1/206	15.0/380	44.1/20	12mm
OPzV 2-250-FR	4.9/124	8.1/206	15.0/380	52.9/24	12mm
OPzV 2-300-FR	5.7/145	8.1/206	15.0/380	64.0/29	12mm
OPzV 2-350-FR	4.9/124	8.1/206	9.5/496	68.3/31	12mm
OPzV 2-420-FR	5.7/145	8.1/206	9.5/496	79.4/36	12mm
OPzV 2-500-FR	6.5/166	8.1/206	9.5/496	92.6/42	12mm
OPzV 2-600-FR	5.7/145	8.1/206	26.4/671	110/50	12mm
OPzV 2-700-FR	10.0/254	8.2/210	9.5/496	131.2/59.5	12mm
OPzV 2-770-FR	10.0/254	8.2/210	9.5/496	144.4/65.5	12mm
OPzV 2-800-FR	7.5/191	8.2/210	26.4/671	150/68	12mm
OPzV 2-1000-FR	9.2/233	8.2/210	26.4/671	181/82	12mm
OPzV 2-1200-FR	10.8/275	8.2/210	26.4/671	214/97	12mm
OPzV 2-1500-FR	10.8/275	8.2/210	32.3/821	265/120	12mm
OPzV 2-2000-FR	15.7/399	8.3/212	31.4/797	353/160	12mm
OPzV 2-2500-FR	19.2/487	8.3/212	31.4/797	441/200	12mm
OPzV 2-3000-FR	22.7/576	8.3/212	31.4/797	529/240	12mm



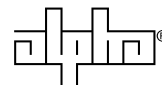


### End Discharge Voltage 1.70V/Cell(Amp)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV2-200-FR	249.6	172.0	111.0	66.8	50.0	40.4	34.5	30.0	24.0	21.0
OPzV2-250-FR	312.0	215.0	137.5	83.5	62.5	50.5	42.5	37.0	30.5	26.0
OPzV2-300-FR	374.5	258.0	165.5	100.5	75.0	60.6	51.0	44.5	36.0	30.5
OPzV2-350-FR	408.0	312.0	202.0	124.5	92.0	74.5	63.5	55.0	44.5	38.0
OPzV2-420-FR	489.6	374.5	242.5	149.5	110.5	89.5	76.5	66.0	53.0	45.0
OPzV2-500-FR	571.5	436.8	282.8	174.5	129.0	104.5	90.0	77.0	62.0	52.0
OPzV2-600-FR	636.0	516.0	351.0	241.5	159.0	126.6	106.5	92.5	73.5	62.0
OPzV2-700-FR	742.0	602.0	409.5	250.0	185.5	148.0	124.0	108.0	85.5	72.0
OPzV2-770-FR	816.0	662.0	450.0	275.0	204.0	162.5	136.5	119.0	94.0	78.0
OPzV2-800-FR	848.0	688.0	468.0	285.6	212.0	168.8	141.6	123.5	97.6	82.0
OPzV2-1000-FR	1060.0	860.0	585.0	357.0	265.0	211.0	177.0	154.0	122.0	102.0
OPzV2-1200-FR	1272.0	1032.0	702.5	428.5	318.0	253.5	212.5	184.8	146.5	122.0
OPzV2-1500-FR	1368.0	1164.0	876.0	566.5	420.0	334.8	278.5	238.8	186.0	154.0
OPzV2-2000-FR	1824.0	1552.0	1168.0	755.5	560.0	446.5	371.5	318.5	248.0	205.0
OPzV2-2500-FR	2280.0	1940.0	1460.0	944.0	700.0	558.0	464.0	398.0	310.0	256.0
OPzV2-3000-FR	2736.0	2328.0	1752.0	1132.0	840.0	669.6	556.8	477.6	372.0	307.5

### End Discharge Voltage 1.75V/Cell(Amp)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	227.2	164.8	110.0	65.6	50.0	40.0	34.0	29.6	24.0	20.0
OPzV 2-250-FR	284.0	206.0	137.5	82.0	62.5	50.0	42.5	37.0	30.0	26.0
OPzV 2-300-FR	340.8	247.2	165.0	98.4	75.0	60.0	51.0	44.4	36.0	30.0
OPzV 2-350-FR	368.0	290.0	196.0	121.5	90.5	74.0	63.0	55.0	44.0	37.0
OPzV 2-420-FR	441.6	348.0	235.2	145.8	108.6	88.8	75.6	66.0	52.8	44.5
OPzV 2-500-FR	515.2	406.0	274.4	170.5	126.7	103.6	88.2	77.0	61.6	51.8
OPzV 2-600-FR	564.0	468.0	336.0	208.2	156.0	126.0	105.6	92.4	73.2	61.0
OPzV 2-700-FR	658.0	546.0	385.0	243.0	182.0	147.0	123.0	108.0	85.5	71.0
OPzV 2-770-FR	723.0	600.0	423.5	267.0	200.0	162.0	134.0	118.5	94.0	78.0
OPzV 2-800-FR	752.0	624.0	448.0	277.6	208.0	168.0	140.8	123.2	97.6	81.0
OPzV 2-1000-FR	940.0	780.0	560.0	347.0	260.0	210.0	176.0	154.0	122.0	101.0
OPzV 2-1200-FR	1128.0	936.0	672.0	416.5	312.0	252.0	211.2	184.8	146.4	121.0
OPzV 2-1500-FR	1200.0	1056.0	825.0	540.0	403.0	326.4	272.4	234.0	184.8	152.5
OPzV 2-2000-FR	1600.0	1408.0	1100.0	720.0	544.0	435.2	363.2	312.0	246.4	203.5
OPzV 2-2500-FR	2000.0	1760.0	1375.0	900.0	630.0	544.0	454.0	390.0	308.0	254.0
OPzV 2-3000-FR	2400.0	2112.0	1650.0	1080.0	816.0	652.8	544.3	468.0	369.6	305.0

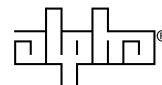


### End Discharge Voltage 1.80V/Cell(Amp)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	201.6	153.6	102.0	63.6	50.0	39.5	33.5	28.8	23.5	20.0
OPzV 2-250-FR	252.5	192.0	127.5	79.5	62.5	49.0	41.5	36.0	29.0	25.0
OPzV 2-300-FR	302.5	230.5	153.0	95.5	75.0	58.8	49.8	43.5	34.8	30.0
OPzV 2-350-FR	320.0	265.0	185.0	117.0	87.5	72.0	61.5	53.5	43.0	36.5
OPzV 2-420-FR	384.0	318.0	222.0	140.5	105.0	85.8	73.8	64.2	51.6	42.5
OPzV 2-500-FR	448.0	371.0	259.0	163.8	122.5	100.5	86.5	74.9	60.5	50.0
OPzV 2-600-FR	492.0	420.0	312.0	199.2	150.0	122.5	103.8	90.0	72.0	60.0
OPzV 2-700-FR	574.0	490.0	364.0	232.0	175.0	143.0	121.0	105.0	84.0	70.0
OPzV 2-770-FR	631.0	539.0	400.0	256.0	192.5	157.0	133.0	115.5	92.5	77.0
OPzV 2-800-FR	656.0	560.0	416.0	265.6	200.0	163.5	138.5	120.0	96.0	80.0
OPzV 2-1000-FR	820.0	700.0	520.0	332.0	250.0	204.0	173.0	150.0	120.0	100.0
OPzV 2-1200-FR	984.0	840.0	624.0	398.5	300.0	244.8	207.6	180.0	144.0	120.0
OPzV 2-1500-FR	1008.0	924.0	738.0	506.5	390.0	313.5	263.0	226.8	180.0	150.0
OPzV 2-2000-FR	1344.0	1232.0	984.0	675.5	520.0	418.0	350.5	302.5	238.5	200.0
OPzV 2-2500-FR	1680.0	1540.0	1230.0	844.0	625.0	522.0	438.0	378.0	298.0	250.0
OPzV 2-3000-FR	2016.0	1848.0	1476.0	1012.0	780.0	626.5	525.5	453.6	357.6	300.0

### End Discharge Voltage 1.83V/Cell(Amp)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	185.6	145.6	98.5	62.0	47.0	38.0	32.5	28.5	23.0	19.5
OPzV 2-250-FR	232.0	182.0	123.0	77.5	58.5	47.5	41.0	35.5	29.0	24.0
OPzV 2-300-FR	278.5	218.5	147.6	93.0	70.2	57.0	49.0	43.0	34.5	29.0
OPzV 2-350-FR	290.0	244.0	175.0	113.0	85.0	70.0	60.0	52.5	42.5	34.5
OPzV 2-420-FR	348.0	292.8	210.0	135.6	102.0	84.0	72.0	63.0	51.0	42.6
OPzV 2-500-FR	406.0	341.6	245.0	158.5	119.0	98.0	84.0	73.5	59.5	49.7
OPzV 2-600-FR	444.0	378.0	288.0	192.0	145.8	120.0	101.5	88.0	70.5	58.5
OPzV 2-700-FR	518.0	441.0	336.0	224.0	169.0	140.0	118.5	102.5	82.0	68.5
OPzV 2-770-FR	570.0	485.0	370.0	246.0	186.0	154.0	130.0	113.0	90.0	75.0
OPzV 2-800-FR	592.0	504.0	384.0	256.0	194.5	160.0	135.5	117.0	94.0	78.0
OPzV 2-1000-FR	740.0	630.0	480.0	320.0	243.0	200.0	169.0	146.0	117.0	97.0
OPzV 2-1200-FR	888.0	756.0	576.0	384.0	292.0	240.0	202.8	175.5	140.5	116.5
OPzV 2-1500-FR	912.0	840.0	678.0	480.0	372.0	300.0	253.5	218.5	171.6	144.0
OPzV 2-2000-FR	1216.0	1120.0	904.0	640.0	496.0	400.0	338.0	291.5	228.8	192.0
OPzV 2-2500-FR	1520.0	1400.0	1130.0	800.0	620.0	500.0	422.0	364.0	286.0	240.0
OPzV 2-3000-FR	1824.0	1680.0	1356.0	960.0	744.0	600.0	506.5	436.8	343.5	288.0

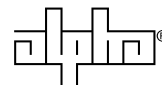


### End Discharge Voltage 1.87V/Cell(Amp)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	163.5	132.0	91.5	58.5	44.5	36.5	31.5	27.5	21.6	18.5
OPzV 2-250-FR	204.0	165.0	114.0	73.0	56.0	46.5	39.0	34.0	27.0	23.0
OPzV 2-300-FR	245.0	198.0	137.0	88.0	67.0	55.0	47.8	41.0	32.5	28.0
OPzV 2-350-FR	250.0	216.0	158.0	106.0	80.5	66.0	57.0	50.0	40.5	34.0
OPzV 2-420-FR	300.0	259.5	190.6	127.5	97.0	79.5	68.0	59.5	48.6	40.8
OPzV 2-500-FR	350.0	302.5	237.0	159.0	121.0	99.0	85.0	74.5	60.8	44.0
OPzV 2-600-FR	360.0	330.0	258.0	177.0	137.0	114.0	97.5	85.0	67.2	56.0
OPzV 2-700-FR	420.0	385.0	301.0	206.5	160.0	133.0	114.0	99.0	78.5	65.0
OPzV 2-770-FR	462.0	423.5	331.0	227.0	176.0	146.0	125.0	109.0	86.0	71.0
OPzV 2-800-FR	480.0	440.0	344.0	236.0	182.5	152.0	130.0	113.0	89.6	74.5
OPzV 2-1000-FR	600.0	550.0	430.0	295.0	228.0	190.0	162.0	141.0	112.0	93.0
OPzV 2-1200-FR	720.0	660.0	516.0	354.0	274.0	228.0	194.5	169.5	134.4	112.0
OPzV 2-1500-FR	720.0	720.0	594.0	432.0	340.0	274.0	233.0	204.0	163.2	136.0
OPzV 2-2000-FR	960.0	960.0	792.0	576.0	453.0	365.0	310.5	272.0	217.6	181.0
OPzV 2-2500-FR	1200.0	1200.0	990.0	720.0	566.0	456.0	388.0	340.0	272.0	226.0
OPzV 2-3000-FR	1440.0	1440.0	1188.0	864.0	679.5	547.5	466.0	408.0	326.4	272.0

### End Discharge Voltage 1.90V/Cell(Amp)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	147.5	120.0	85.0	55.0	42.0	34.5	30.0	26.0	20.5	18.0
OPzV 2-250-FR	184.0	150.0	106.0	69.0	53.0	43.0	38.0	33.0	26.0	22.0
OPzV 2-300-FR	220.8	180.0	128.0	82.5	63.0	52.0	45.0	39.0	31.0	26.5
OPzV 2-350-FR	208.0	195.0	145.0	98.0	76.0	63.0	53.0	48.0	39.0	33.0
OPzV 2-420-FR	250.0	234.0	174.0	117.0	91.0	75.0	64.0	57.0	47.0	39.0
OPzV 2-500-FR	292.0	273.0	203.0	137.0	106.0	88.0	74.5	67.0	55.0	46.0
OPzV 2-600-FR	312.0	294.0	234.0	165.0	129.0	108.0	92.5	80.0	64.5	53.5
OPzV 2-700-FR	364.0	343.0	273.0	192.5	150.0	126.0	108.0	93.0	75.0	62.5
OPzV 2-770-FR	400.0	377.0	300.0	211.0	165.5	138.5	119.0	102.0	82.5	68.5
OPzV 2-800-FR	416.0	392.0	312.0	220.0	172.0	144.0	123.5	106.5	86.0	71.5
OPzV 2-1000-FR	520.0	490.0	390.0	275.0	215.0	180.0	154.0	133.0	107.0	89.0
OPzV 2-1200-FR	624.0	588.0	468.0	330.0	258.0	216.0	184.5	160.0	128.5	107.0
OPzV 2-1500-FR	600.0	600.0	522.0	390.0	307.5	248.5	211.5	186.0	154.0	127.5
OPzV 2-2000-FR	800.0	800.0	696.0	520.0	410.0	331.5	282.0	248.0	205.0	170.0
OPzV 2-2500-FR	1000.0	1000.0	870.0	650.0	512.0	414.0	352.0	310.0	256.0	212.0
OPzV 2-3000-FR	1200.0	1200.0	1044.0	780.0	614.4	497.0	422.5	372.0	307.5	254.5

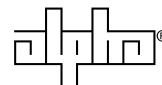


## End Discharge Voltage 1.70/Cell(Watts)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	431.0	331.0	235.0	146.0	109.0	87.0	73.0	64.0	49.0	41.0
OPzV 2-250-FR	540.0	414.0	294.0	183.0	136.0	110.0	91.0	79.0	63.0	52.0
OPzV 2-300-FR	648.0	497.0	354.0	219.0	162.0	131.0	109.0	95.0	75.0	63.0
OPzV 2-350-FR	656.0	540.0	409.0	265.0	196.0	158.0	132.0	114.0	90.0	75.0
OPzV 2-420-FR	787.0	649.0	491.0	318.0	235.0	191.0	159.0	137.0	106.0	90.0
OPzV 2-500-FR	918.0	756.0	573.0	369.0	274.0	222.0	185.0	160.0	126.0	105.0
OPzV 2-600-FR	993.0	853.0	687.0	469.0	353.0	284.0	237.0	206.0	163.0	137.0
OPzV 2-700-FR	1141.0	980.0	790.0	539.0	406.0	327.0	274.0	238.0	188.0	159.0
OPzV 2-770-FR	1255.0	1078.0	869.0	593.0	447.0	359.0	302.0	262.0	207.0	175.0
OPzV 2-800-FR	1324.0	1137.0	916.0	625.0	470.0	380.0	317.0	275.0	217.0	184.0
OPzV 2-1000-FR	1653.0	1420.0	1145.0	781.0	599.0	473.0	395.0	343.0	271.0	229.0
OPzV 2-1200-FR	1984.0	1705.0	1373.0	938.0	708.0	588.0	475.0	412.0	326.0	275.0
OPzV 2-1500-FR	2069.0	1839.0	1546.0	1092.0	808.0	645.0	537.0	456.0	367.0	306.0
OPzV 2-2000-FR	2758.0	2452.0	2060.0	1457.0	1076.0	861.0	716.0	620.0	488.0	409.0
OPzV 2-2500-FR	3448.0	3065.0	2578.0	1821.0	1346.0	1076.0	894.0	775.0	610.0	512.0
OPzV 2-3000-FR	4136.0	3678.0	3094.0	2185.0	1614.0	1292.0	1075.0	931.0	731.0	615.0

## End Discharge Voltage 1.75/Cell(Watts)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV2-200-FR	389.0	310.0	226.0	145.0	109.0	87.0	73.0	64.0	49.0	41.0
OPzV2-250-FR	487.0	388.0	282.0	181.0	135.0	110.0	91.0	79.0	63.0	52.0
OPzV2-300-FR	585.0	464.0	340.0	217.0	162.0	131.0	109.0	95.0	75.0	63.0
OPzV2-350-FR	595.0	499.0	391.0	257.0	196.0	158.0	132.0	114.0	90.0	75.0
OPzV2-420-FR	715.0	599.0	469.0	308.0	234.0	191.0	159.0	137.0	108.0	90.0
OPzV2-500-FR	833.0	698.0	547.0	358.0	274.0	222.0	185.0	160.0	126.0	105.0
OPzV2-600-FR	888.0	772.0	639.0	447.0	347.0	284.0	237.0	206.0	183.0	137.0
OPzV2-700-FR	1021.0	888.0	725.0	513.0	399.0	327.0	274.0	238.0	188.0	159.0
OPzV2-770-FR	1123.0	977.0	809.0	565.0	439.0	359.0	302.0	262.0	207.0	175.0
OPzV2-800-FR	1185.0	1030.0	853.0	595.0	464.0	380.0	317.0	275.0	217.0	184.0
OPzV2-1000-FR	1480.0	1288.0	1065.0	745.0	579.0	473.0	395.0	343.0	271.0	229.0
OPzV2-1200-FR	1776.0	1546.0	1278.0	894.0	694.0	588.0	475.0	412.0	326.0	276.0
OPzV2-1500-FR	1840.0	1653.0	1376.0	1025.0	803.0	645.0	537.0	466.0	367.0	306.0
OPzV2-2000-FR	2453.0	2205.0	1635.0	1367.0	1071.0	861.0	716.0	620.0	488.0	409.0
OPzV2-2500-FR	3066.0	2755.0	2294.0	1709.0	1338.0	1076.0	894.0	775.0	610.0	512.0
OPzV2-3000-FR	3880.0	3308.0	2753.0	2050.0	1607.0	1292.0	1075.0	931.0	731.0	615.0

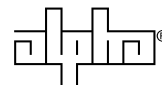


### End Discharge Voltage 1.80/Cell(Watts)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	343.0	279.0	208.0	137.0	106.0	85.0	72.0	63.0	49.0	41.0
OPzV 2-250-FR	429.0	349.0	261.0	172.0	131.0	107.0	90.0	78.0	63.0	52.0
OPzV 2-300-FR	516.0	420.0	314.0	205.0	157.0	128.0	108.0	94.0	75.0	63.0
OPzV 2-350-FR	523.0	450.0	351.0	239.0	187.0	152.0	128.0	112.0	90.0	75.0
OPzV 2-420-FR	626.0	539.0	420.0	286.0	223.0	183.0	154.0	135.0	108.0	90.0
OPzV 2-500-FR	731.0	628.0	492.0	334.0	262.0	214.0	180.0	158.0	126.0	105.0
OPzV 2-600-FR	771.0	683.0	564.0	411.0	328.0	269.0	227.0	200.0	161.0	136.0
OPzV 2-700-FR	887.0	785.0	649.0	473.0	377.0	309.0	263.0	231.0	186.0	158.0
OPzV 2-770-FR	975.0	864.0	714.0	520.0	415.0	340.0	289.0	254.0	204.0	173.0
OPzV 2-800-FR	1028.0	911.0	753.0	549.0	437.0	358.0	304.0	267.0	213.0	182.0
OPzV 2-1000-FR	1284.0	1138.0	940.0	685.0	547.0	447.0	378.0	332.0	267.0	227.0
OPzV 2-1200-FR	1542.0	1366.0	1128.0	823.0	656.0	537.0	455.0	399.0	320.0	274.0
OPzV 2-1500-FR	1571.0	1450.0	1232.0	924.0	742.0	612.0	519.0	457.0	367.0	306.0
OPzV 2-2000-FR	2096.0	1935.0	1643.0	1231.0	990.0	815.0	691.0	608.0	458.0	409.0
OPzV 2-2500-FR	2620.0	2419.0	2054.0	1539.0	1237.0	1019.0	865.0	760.0	610.0	512.0
OPzV 2-3000-FR	3144.0	2903.0	2465.0	1846.0	1485.0	1224.0	1036.0	913.0	731.0	515.0

### End Discharge Voltage 1.83/Cell(Watts)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	333.0	271.0	202.0	133.0	103.0	82.0	70.0	61.0	48.0	40.0
OPzV 2-250-FR	416.0	339.0	253.0	167.0	127.0	104.0	87.0	76.0	61.0	50.0
OPzV 2-300-FR	501.0	407.0	305.0	199.0	152.0	124.0	105.0	91.0	73.0	61.0
OPzV 2-350-FR	507.0	437.0	340.0	232.0	181.0	147.0	124.0	109.0	87.0	73.0
OPzV 2-420-FR	607.0	523.0	407.0	277.0	216.0	178.0	149.0	131.0	105.0	87.0
OPzV 2-500-FR	709.0	609.0	477.0	324.0	254.0	208.0	175.0	153.0	122.0	102.0
OPzV 2-600-FR	748.0	663.0	547.0	399.0	318.0	261.0	220.0	194.0	156.0	132.0
OPzV 2-700-FR	860.0	751.0	630.0	459.0	366.0	300.0	255.0	224.0	180.0	153.0
OPzV 2-770-FR	945.0	838.0	593.0	504.0	403.0	330.0	280.0	246.0	198.0	168.0
OPzV 2-800-FR	997.0	884.0	730.0	533.0	424.0	347.0	295.0	259.0	207.0	177.0
OPzV 2-1000-FR	1245.0	1104.0	912.0	664.0	531.0	434.0	367.0	322.0	259.0	220.0
OPzV 2-1200-FR	1496.0	1325.0	1094.0	798.0	636.0	521.0	441.0	387.0	310.0	266.0
OPzV 2-1500-FR	1524.0	1407.0	1195.0	896.0	720.0	594.0	503.0	443.0	356.0	297.0
OPzV 2-2000-FR	2033.0	1877.0	1594.0	1194.0	950.0	791.0	670.0	590.0	473.0	397.0
OPzV 2-2500-FR	2541.0	2346.0	1992.0	1493.0	1200.0	988.0	839.0	737.0	592.0	497.0
OPzV 2-3000-FR	3050.0	2816.0	2391.0	1791.0	1440.0	1187.0	1005.0	886.0	709.0	597.0



## End Discharge Voltage 1.87/Cell(Watts)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	257.0	223.0	172.0	118.0	90.0	74.0	64.0	56.0	44.0	37.0
OPzV 2-250-FR	322.0	278.0	214.0	147.0	113.0	93.0	79.0	69.0	56.0	47.0
OPzV 2-300-FR	388.0	335.0	258.0	177.0	135.0	113.0	95.0	83.0	67.0	57.0
OPzV 2-350-FR	370.0	350.0	284.0	202.0	158.0	131.0	112.0	99.0	80.0	69.0
OPzV 2-420-FR	445.0	420.0	341.0	242.0	190.0	157.0	135.0	118.0	96.0	83.0
OPzV 2-500-FR	519.0	491.0	398.0	282.0	221.0	184.0	158.0	138.0	112.0	97.0
OPzV 2-600-FR	552.0	527.0	444.0	339.0	277.0	230.0	199.0	175.0	142.0	122.0
OPzV 2-700-FR	635.0	606.0	510.0	390.0	319.0	265.0	230.0	202.0	165.0	141.0
OPzV 2-770-FR	698.0	666.0	561.0	429.0	350.0	291.0	253.0	222.0	181.0	155.0
OPzV 2-800-FR	736.0	703.0	592.0	451.0	368.0	308.0	265.0	233.0	190.0	164.0
OPzV 2-1000-FR	920.0	878.0	740.0	565.0	430.0	386.0	331.0	292.0	237.0	204.0
OPzV 2-1200-FR	1104.0	1054.0	888.0	677.0	553.0	463.0	397.0	349.0	284.0	245.0
OPzV 2-1500-FR	1119.0	1095.0	960.0	744.0	612.0	517.0	447.0	393.0	320.0	275.0
OPzV 2-2000-FR	1492.0	1460.0	1280.0	992.0	816.0	688.0	595.0	524.0	426.0	367.0
OPzV 2-2500-FR	1866.0	1825.0	1600.0	1240.0	1020.0	861.0	744.0	655.0	533.0	459.0
OPzV 2-3000-FR	2239.0	2189.0	1920.0	1487.0	1223.0	1032.0	893.0	787.0	640.0	550.0

## End Discharge Voltage 1.90/Cell(Watts)

Type	Minutes		Hours							
	15	30	1	2	3	4	5	6	8	10
OPzV 2-200-FR	209.0	190.0	152.0	107.0	83.0	68.0	58.0	51.0	40.0	33.0
OPzV 2-250-FR	261.0	236.0	190.0	134.0	104.0	84.0	73.0	63.0	51.0	43.0
OPzV 2-300-FR	313.0	285.0	227.0	160.0	125.0	102.0	87.0	76.0	62.0	53.0
OPzV 2-350-FR	297.0	280.0	253.0	182.0	142.0	119.0	102.0	90.0	74.0	64.0
OPzV 2-420-FR	357.0	336.0	301.0	217.0	171.0	142.0	122.0	108.0	89.0	77.0
OPzV 2-500-FR	416.0	393.0	352.0	255.0	199.0	166.0	143.0	126.0	104.0	89.0
OPzV 2-600-FR	446.0	422.0	390.0	300.0	247.0	208.0	180.0	159.0	130.0	113.0
OPzV 2-700-FR	512.0	485.0	448.0	345.0	284.0	239.0	208.0	183.0	151.0	142.0
OPzV 2-770-FR	563.0	533.0	493.0	380.0	312.0	263.0	228.0	201.0	166.0	157.0
OPzV 2-800-FR	595.0	562.0	520.0	400.0	329.0	278.0	239.0	210.0	174.0	150.0
OPzV 2-1000-FR	743.0	702.0	650.0	500.0	411.0	347.0	298.0	265.0	217.0	188.0
OPzV 2-1200-FR	891.0	843.0	780.0	600.0	493.0	417.0	359.0	318.0	261.0	225.0
OPzV 2-1500-FR	906.0	876.0	835.0	655.0	545.0	466.0	405.0	357.0	294.0	254.0
OPzV 2-2000-FR	1209.0	1168.0	1112.0	873.0	725.0	621.0	540.0	476.0	392.0	338.0
OPzV 2-2500-FR	1512.0	1460.0	1392.0	1091.0	907.0	775.0	675.0	595.0	490.0	423.0
OPzV 2-3000-FR	1815.0	1751.0	1670.0	1309.0	1087.0	933.0	811.0	713.0	588.0	509.0

For more information visit [www.alpha.com](http://www.alpha.com)

**Alpha Technologies** United States Bellingham, Washington Tel: 360 647 2360 Fax: 360 671 4936  
 Canada Burnaby, British Columbia Tel: 604 430 1476 Fax: 604 430 8908

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