

OPzV series are 2V cells made in gel technology, with a tubular (armoured) positive plate. Thanks to this, their design life can reach in the standby use **over 18 years at 25°C**. EUROPOWER OPzV cells are also suitable for deep discharges and their cyclic life amounts to 1700 cycles for 80% discharge depth.

TECHNICAL DATA

Nominal voltage	2 V	
Nominal capacity	2000 Ah / C ₁₀	
Cell per unit	1	
Technology	GEL	
Design life	over 20 years @ 20°C* over 18 years @ 25°C	
Dimensions	height	802,0 mm
	length	399,0 mm
	width	212,0 mm
Weight	~155 kg	
Capacity @ 25°C	24h 89,2A @1,80V/cell	2140,8 Ah
	10h 200A @1,80V/cell	2000,0 Ah
	3h 504A @1,75V/cell	1512,0 Ah
	1h 1125A @1,70V/cell	1125,0 Ah
Ambient nominal temperature range	charge	0°C ~ 40°C
	discharge	-20°C ~ 50°C
	storage	-20°C ~ 40°C
Internal resistance	@ fully charge battery	≤0,142 mΩ
Charging voltage @ 20°C	standby use	2,25V (-3 mV/°C)
	cycle use	2,35 V do 2,40V (-4 mV/°C)
Charging current	recommended	200 A
	maximum	500 A
Capacity retention during storage @ 20°C (self discharge)	after 1 month	99 %
	after 6 months	92 %
	after 12 months	84 %
Container material	standard	ABS UL 94-HB
	optional	ABS UL 94-V0**
Terminal	faston F1	M8
Terminal hardware initial torque	15,0 Nm	

*)- According to Eurobat (Long Life group)

**)- Flame-retardant

NO TRANSPORT RESTRICTED

Not restricted for air, surface and water transport. Classified as non-hazardous material (IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27)

DISCHARGE CHARACTERISTICS

• Constant current (Current [A], 25°C / 77°F)

F.V. V/cell	Discharge time										
	30 min	1h	3h	4h	5h	6h	8h	10h	24h	48h	100h
1,90	1016	772	426	356	305	263	212	176	79,2	43,9	23,6
1,85	1191	967	476	383	328	285	234	196	86,2	47,0	25,6
1,80	1416	1040	492	395	339	295	241	200	89,2	49,4	26,5
1,75	1548	1092	504	404	347	303	246	205	91,1	50,2	27,3
1,70	1608	1125	515	411	352	309	251	208	93,1	50,8	28,1

• Constant power (Power [W/cell], 25°C / 77°F)

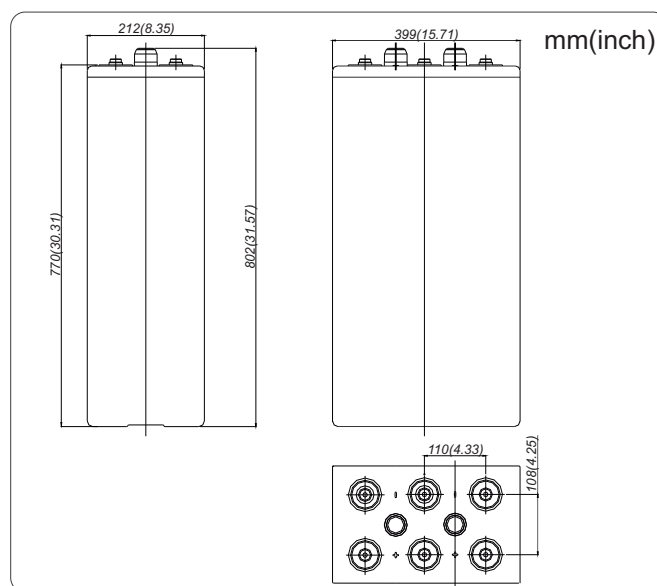
F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	2511	1686	1158	937	742	622,6	503,2	417,0	351,1	226,7	154,0
1,85	2752	1894	1277	970	762	643,5	554,9	460,0	387,1	250,0	169,8
1,80	2864	2036	1327	1020	802	661,3	579,0	480,0	403,9	260,7	177,2
1,75	2983	2158	1376	1049	822	693,0	610,2	507,9	425,7	274,8	187,1
1,70	3109	2294	1416	1076	855	718,5	622,0	516,3	433,7	280,0	189,9

F.V. - Final voltage

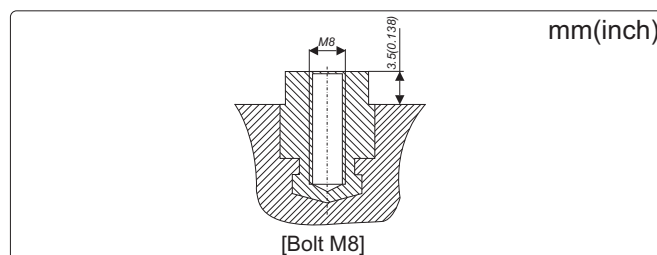
APPLICATIONS

- Uninterruptible Power Supplies (UPS)
- Telecommunication power plants
- GSM base stations
- Substations
- Cable television
- Renewable energy sources

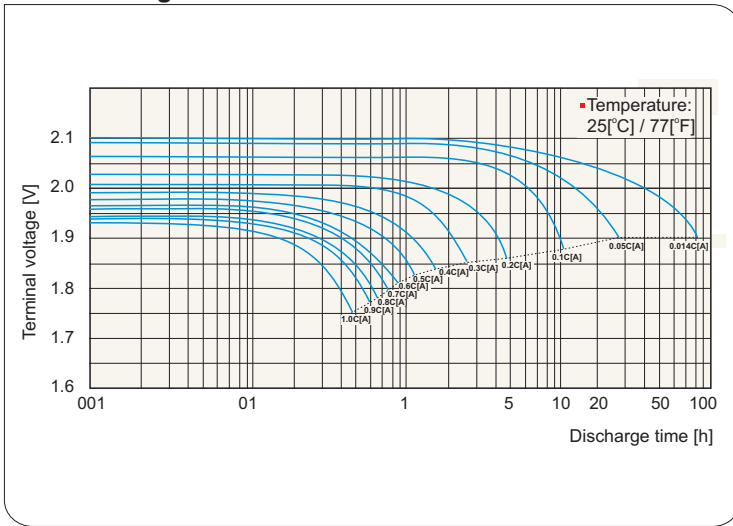
DIMENSIONS



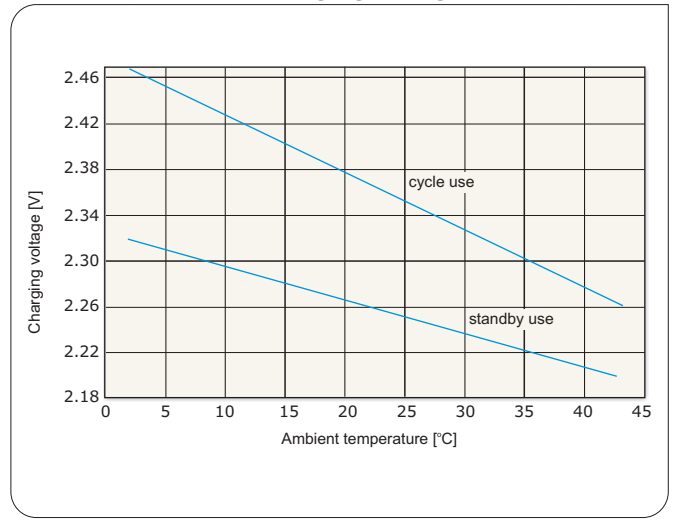
TERMINALS



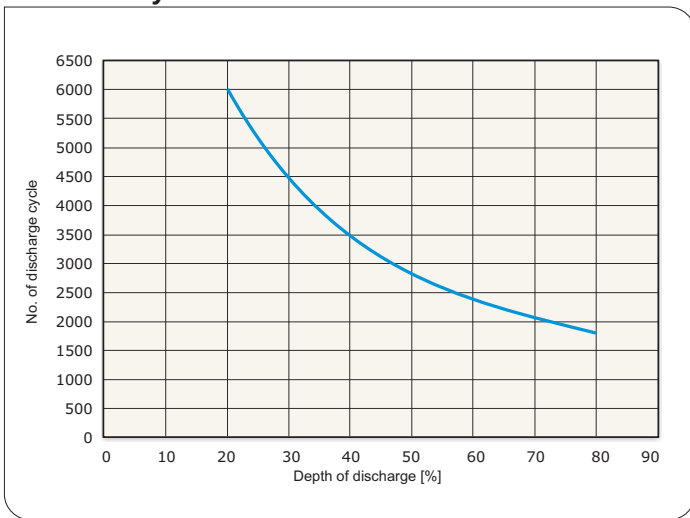
Cell discharge characteristics



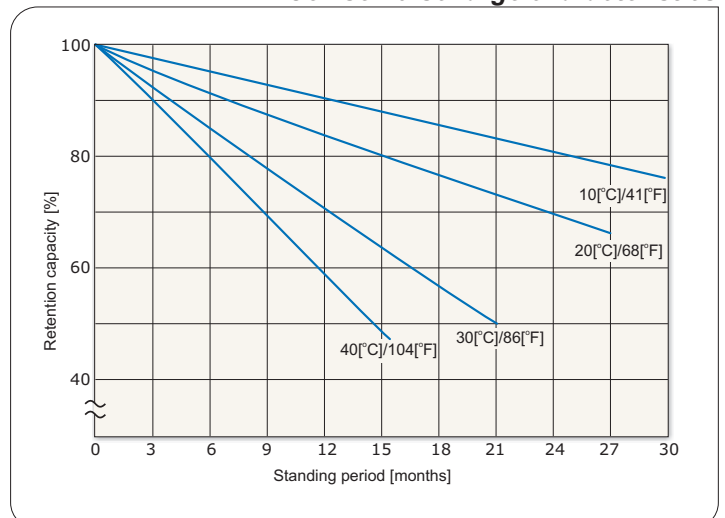
Relationship between charging voltage and temperature



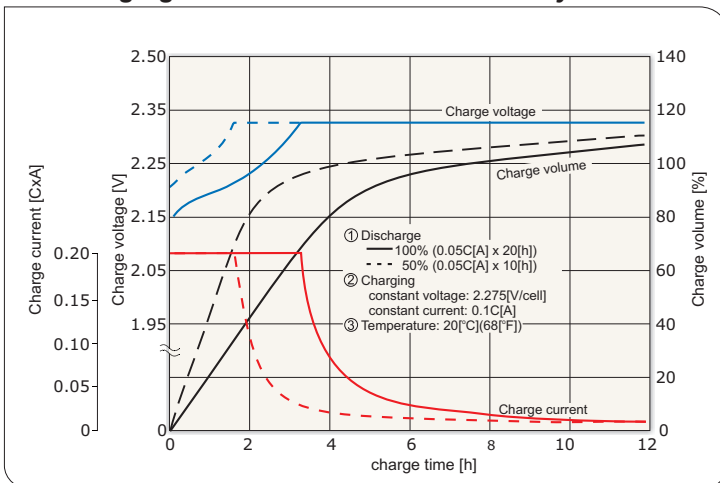
Cell life in cyclic use



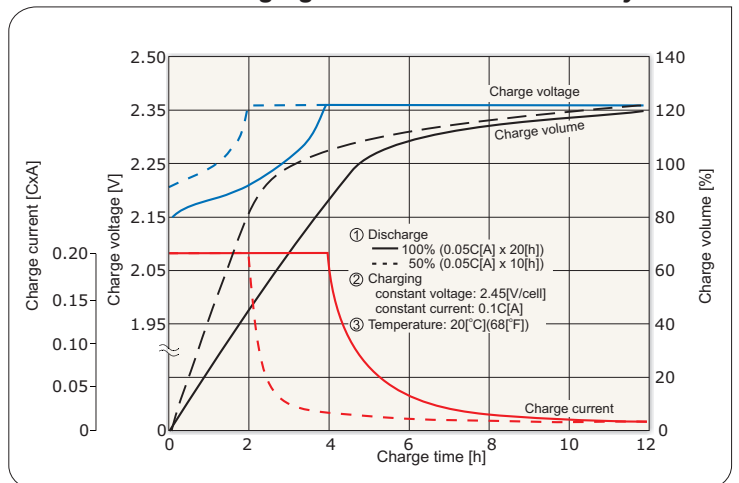
Cell self discharge characteristics



Cell charging characteristics for the standby use



Cell charging characteristics for the cycle use



Battery discharge current and final discharge voltage

Discharge current [A]	0.2C > I	0.2C ≤ I < 0.5C	0.5C ≤ I < 1.0C	1.0C ≤ I
Final discharge voltage [V/cell]	1.90	1.85	1.80	1.75

*) C - Capacity

