

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	1200 Ah / C ₁₀		
Cell per unit	1		
Technology	GEL		
Design life	over 20 years @ 20°C* over 18 years @ 25°C		
Dimensions	height	678,0 mm	
	length	275,0 mm	
	width	210,0 mm	
Weight	~93 kg		
Capacity @ 25°C	24h	53,6A @ 1,80V/cell	1286,4 Ah
	10h	120A @ 1,80V/cell	1200,0 Ah
	3h	310A @ 1,75V/cell	930,0 Ah
	1h	650A @ 1,70V/cell	650,0 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	≤0,22 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	120 A	
	maximum	300 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	750	551	267	212	180	155	127	106	47,6	25,4	14,0
1,85	834	612	296	236	200	172	141	118	51,8	28,2	15,6
1,80	850	624	302	240	204	176	144	120	53,6	28,8	15,9
1,75	872	640	310	246	209	180	148	123	54,8	29,5	16,3
1,70	885	650	315	250	212	183	150	125	55,7	29,9	16,5

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

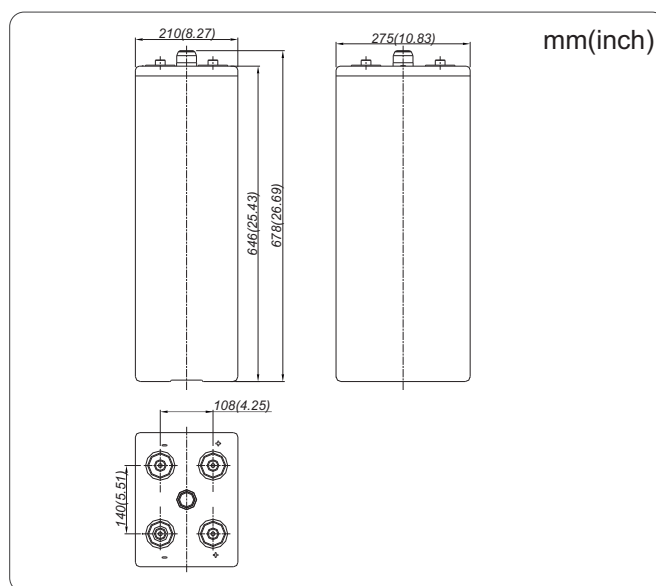
F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	1553	1111	715	553	434	356	315	263	220	141	97
1,85	1638	1170	754	583	458	376	332	277	232	150	102
1,80	1715	1224	789	626	480	394	348	291	243	156	106
1,75	1807	1293	827	635	505	415	367	305	256	165	112
1,70	1842	1317	848	642	515	423	374	310	261	168	114

F.V. - Final voltage

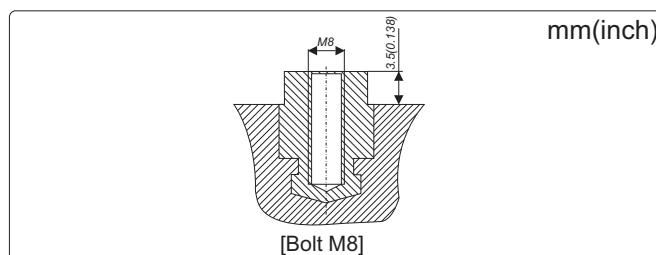
APPLICATIONS

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

DIMENSIONS

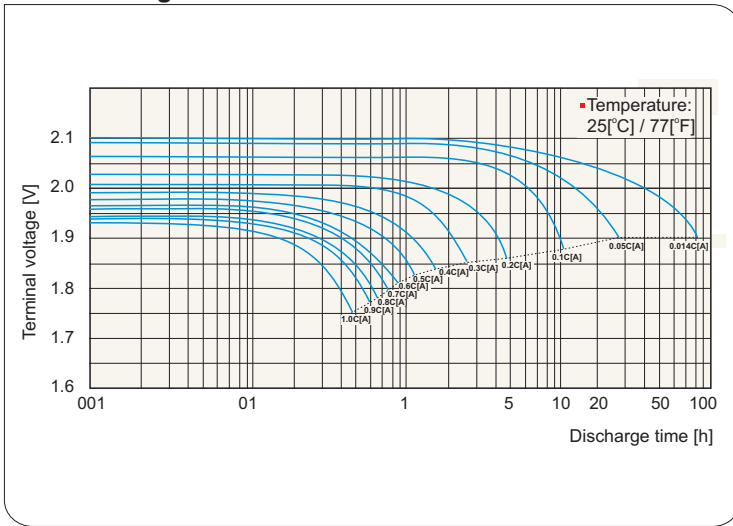


TERMINALS

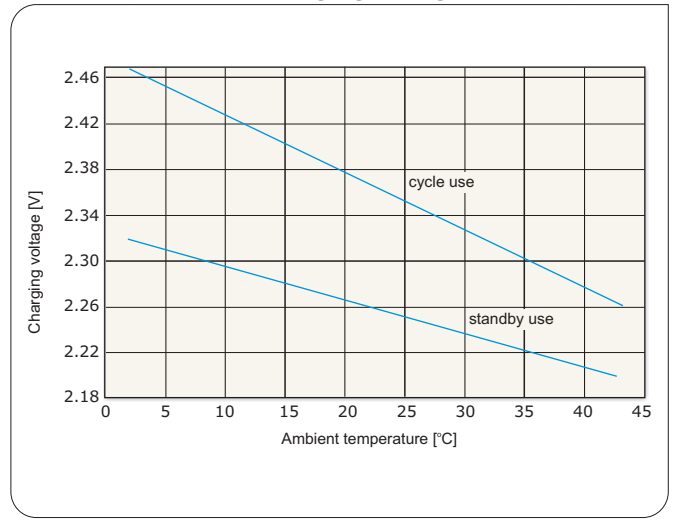


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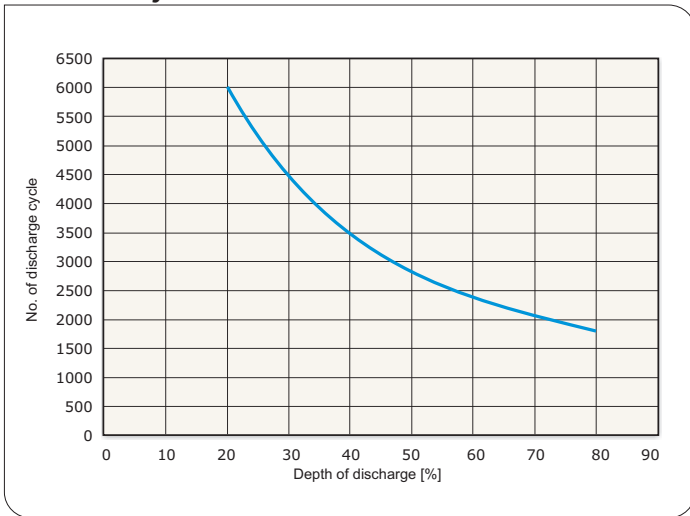
Cell discharge characteristics



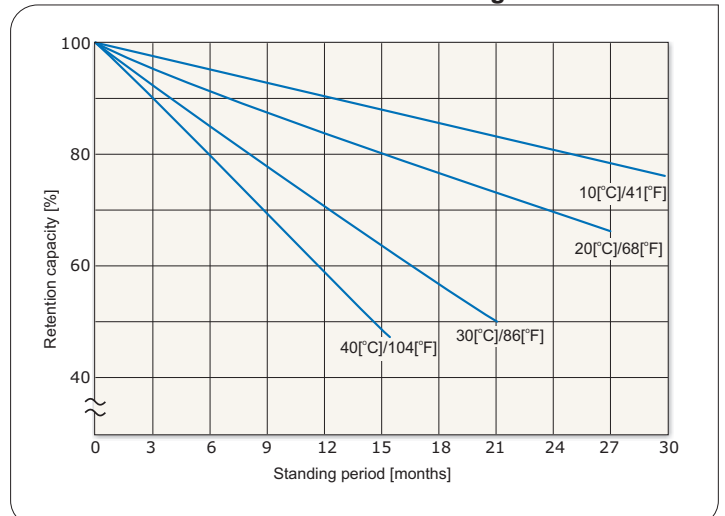
Relationship between charging voltage and temperature



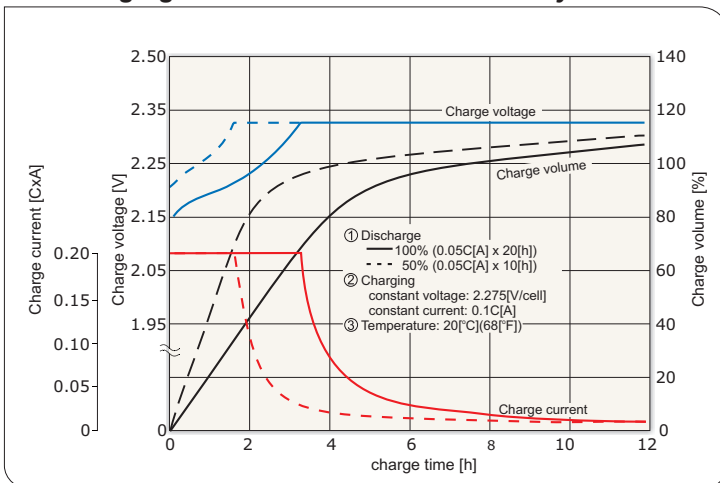
Cell life in cyclic use



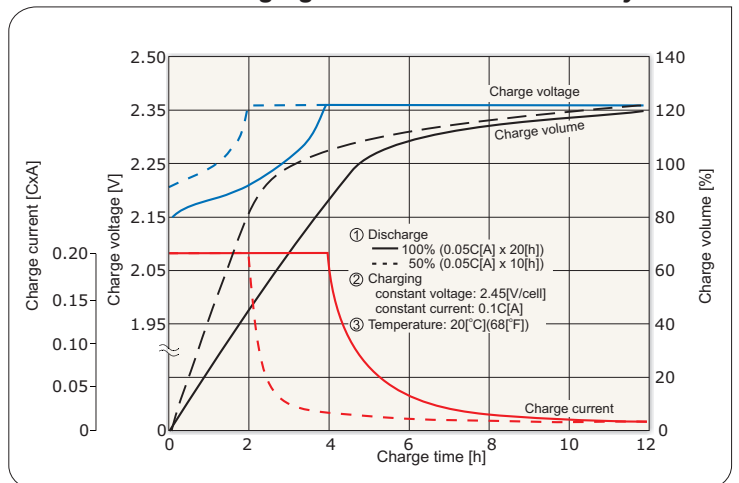
Cell self discharge characteristics



Cell charging characteristics for the standby use



Cell charging characteristics for the cycle use



Battery discharge current and final discharge voltage

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

*) C - Capacity

