

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	600 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	145,0 mm	
	width	206,0 mm	
Weight	~49 kg		
Capacity @ 25°C	24h	27,0A @ 1,80V/cell	648,0 Ah
	10h	60,2A @ 1,80V/cell	602,0 Ah
	3h	153A @ 1,75V/cell	459,0 Ah
	1h	341A @ 1,70V/cell	341,0 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	≤0,425 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	60 A	
	maximum	150 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	308	234	129	108	92,4	79,8	64,2	53,4	24,0	13,30	7,15
1,85	361	293	144	116	99,3	86,4	70,9	59,4	26,1	14,24	7,76
1,80	429	315	149	120	103	89,0	72,9	60,2	27,0	14,96	8,02
1,75	469	331	153	122	105	92,0	74,7	62,1	27,6	15,21	8,28
1,70	487	341	156	125	107	94,0	76,1	63,0	28,2	15,40	8,51

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

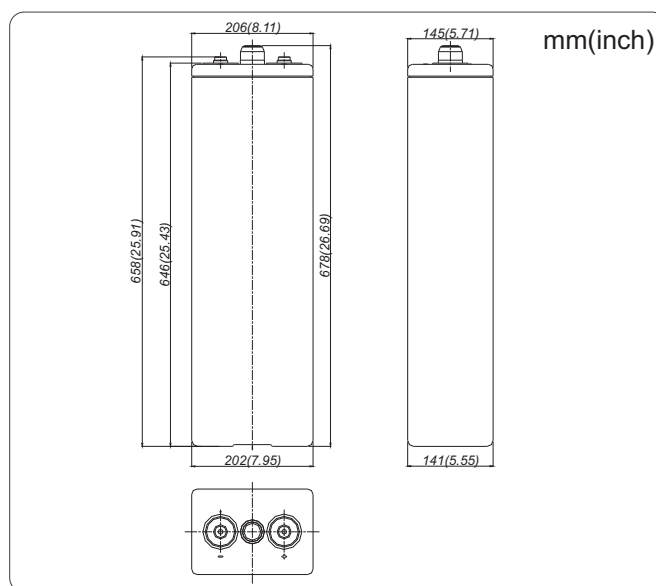
F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	761	511	351	284	220	190	152,6	126,4	106,4	68,7	46,7
1,85	834	574	387	294	231	195	168,1	140,0	117,3	75,7	51,5
1,80	868	617	402	309	243	200	175,5	146,7	122,4	79,0	53,7
1,75	904	654	417	318	249	210	185,0	153,9	129,0	83,3	56,7
1,70	942	695	429	326	259	218	188,5	156,5	131,4	84,8	57,5

F.V. - Final voltage

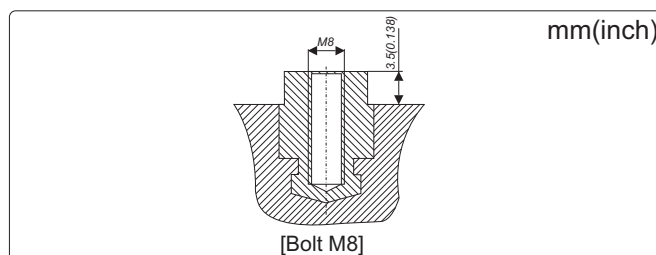
APPLICATIONS

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

DIMENSIONS

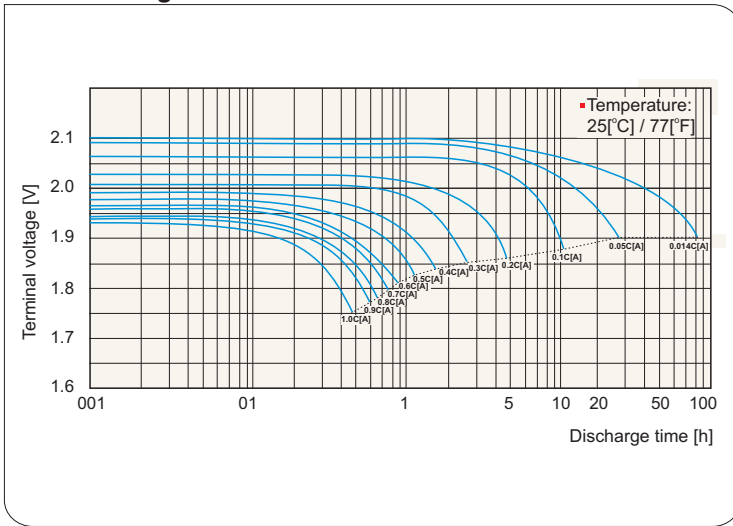


TERMINALS

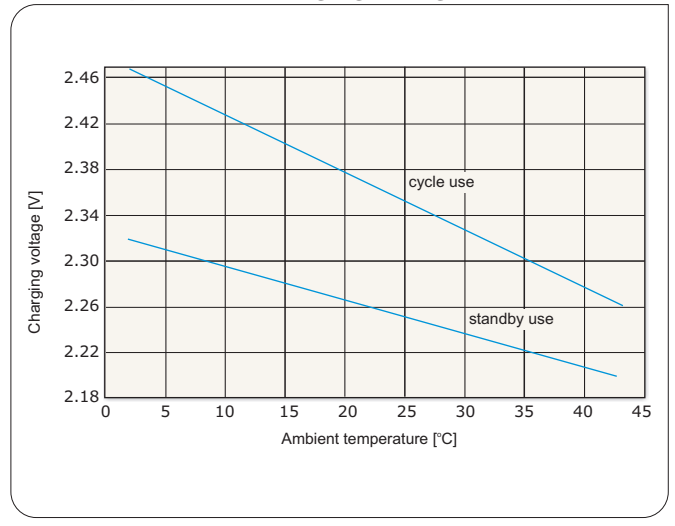


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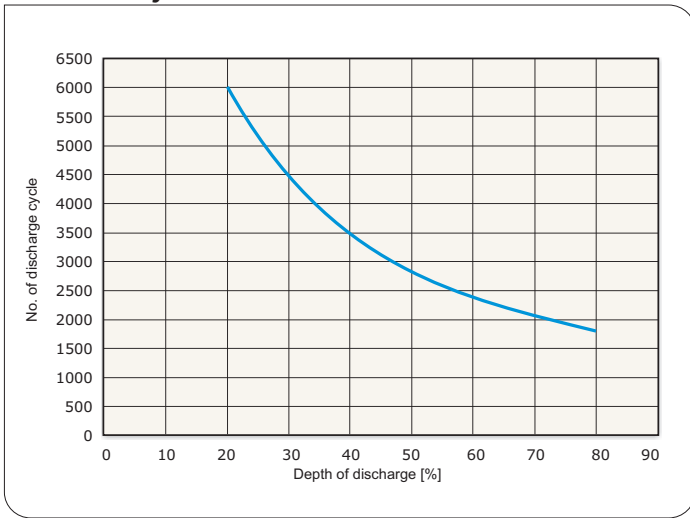
Cell discharge characteristics



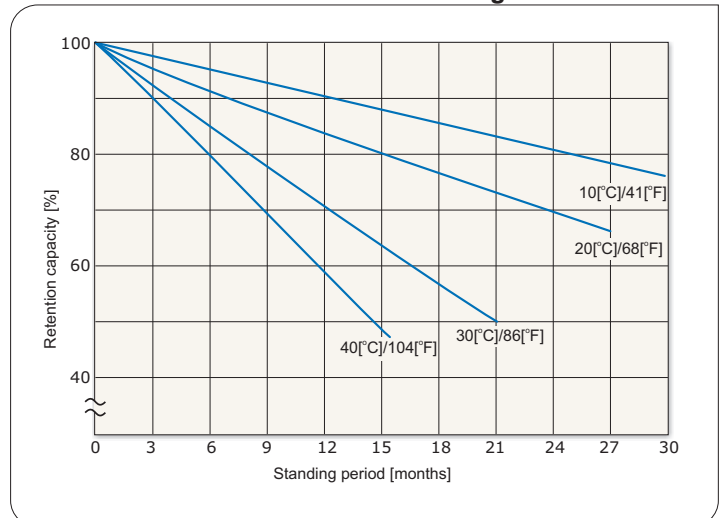
Relationship between charging voltage and temperature



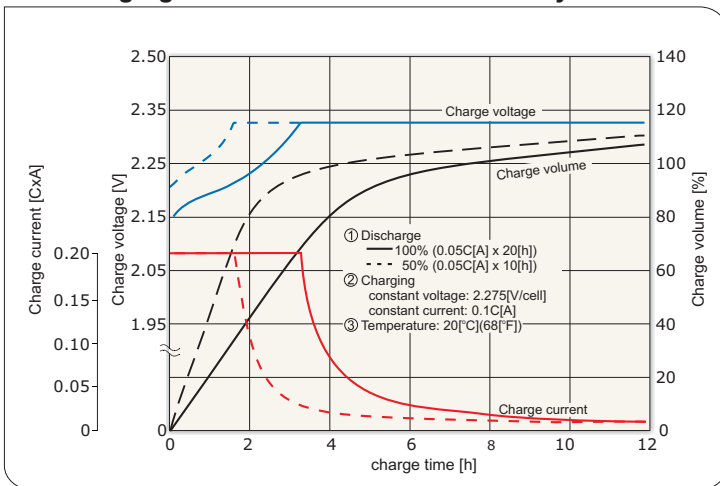
Cell life in cyclic use



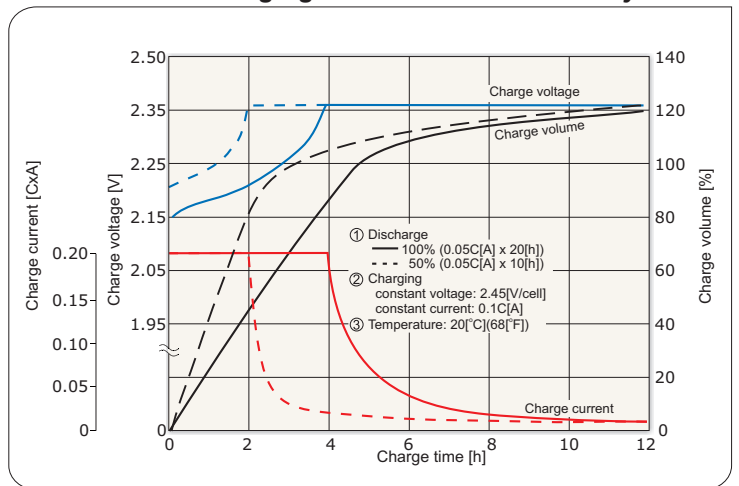
Cell self discharge characteristics



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 ≤ 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

