

**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	1500 Ah / C <sub>10</sub>		
Cell per unit	1		
Technology	GEL		
Design life	over 20 years @ 20°C* over 18 years @ 25°C		
Dimensions	height	827,0 mm	
	length	275,0 mm	
	width	210,0 mm	
Weight	~117 kg		
Capacity @ 25°C	24h	67,0A @1,80V/cell	1608,0 Ah
	10h	150A @1,80V/cell	1500,0 Ah
	3h	378A @1,75V/cell	1134,0 Ah
	1h	844A @1,70V/cell	844,0 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	≤0,185 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	150 A	
	maximum	375 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	763	580	320	268	229	198	159	132	59,5	33,0	17,7
1,85	894	726	358	288	246	214	176	147	64,8	35,3	19,2
1,80	1063	780	369	297	254	221	181	150	67,0	37,1	19,9
1,75	1162	820	378	303	260	227	185	154	68,4	37,7	20,5
1,70	1207	844	386	308	265	232	189	156	69,9	38,2	21,1

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

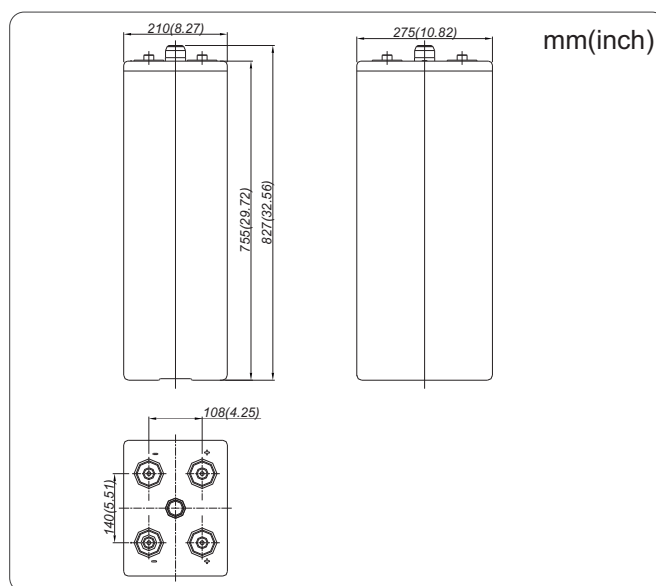
F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	1885	1266	870	704	550	470,5	378,0	313,0	263,6	170,2	115,7
1,85	2066	1422	959	728	572	483,1	416,6	345,2	290,6	187,6	127,5
1,80	2150	1529	996	766	602	496,5	435,0	360,0	303,2	195,7	133,0
1,75	2240	1620	1033	788	617	520,3	458,0	381,3	319,6	206,3	140,5
1,70	2334	1722	1063	808	642	539,4	467,0	387,6	325,6	210,2	142,5

F.V. - Final voltage

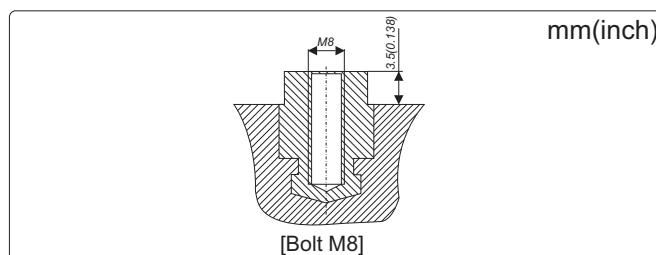
### APPLICATIONS

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

### DIMENSIONS

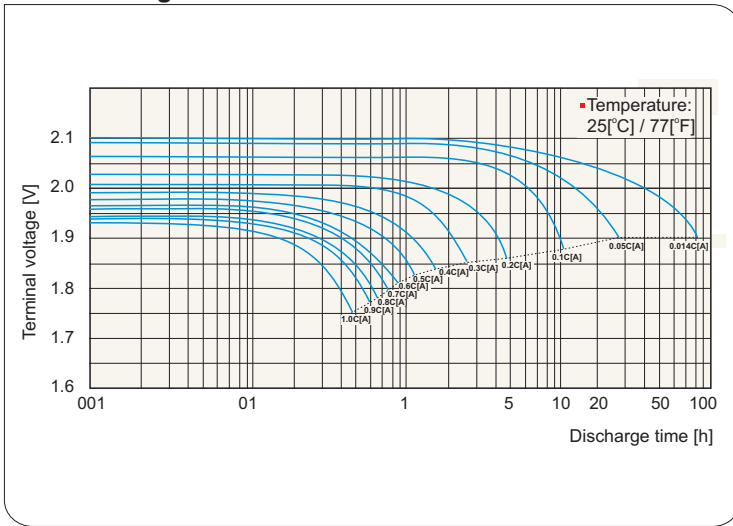


### TERMINALS

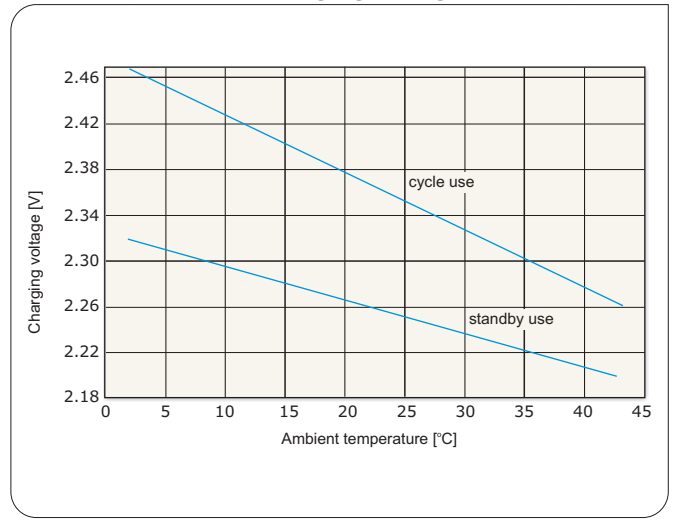


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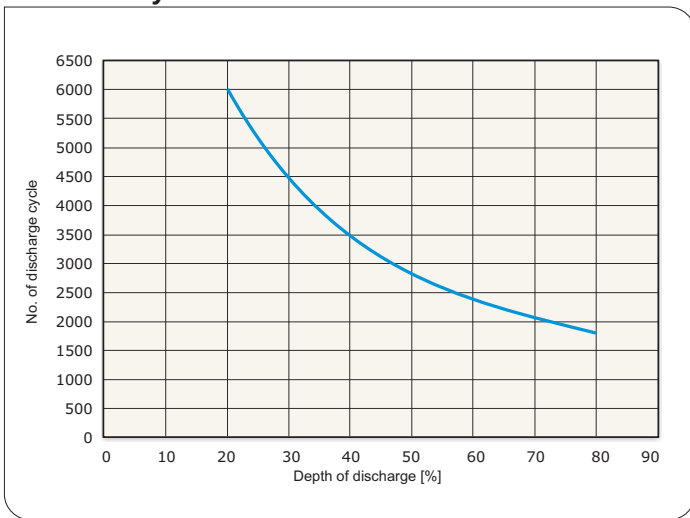
## Cell discharge characteristics



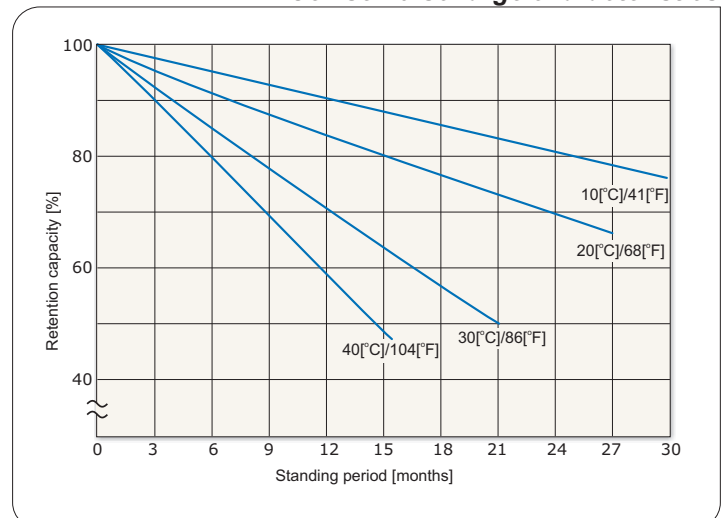
## Relationship between charging voltage and temperature



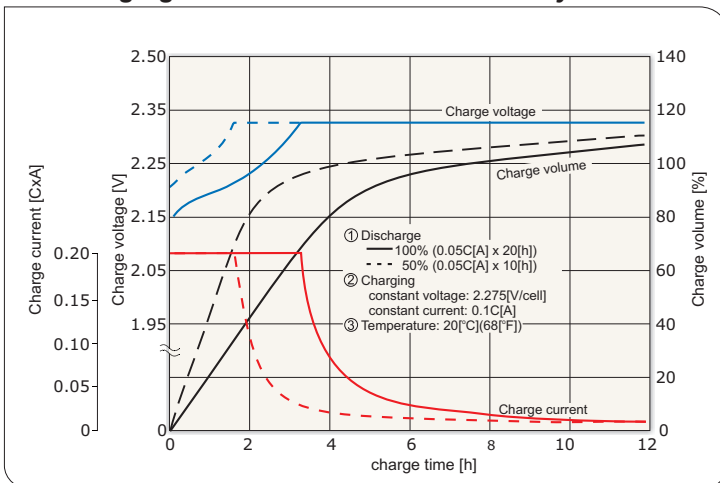
## Cell life in cyclic use



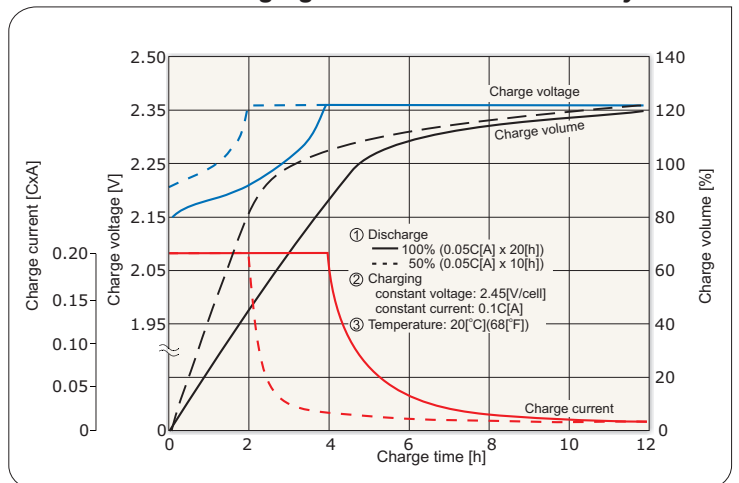
## Cell self discharge characteristics



## 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

