



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	800 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	191,0 mm	
	width	210,0 mm	
Weight	~65 kg		
Capacity @ 25°C	24h	35,9A @ 1,80V/cell	861,6 Ah
	10h	80,0A @ 1,80V/cell	800,0 Ah
	3h	203A @ 1,75V/cell	609,0 Ah
	1h	453A @ 1,70V/cell	453,0 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	≤0,29 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	80 A	
	maximum	200 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	

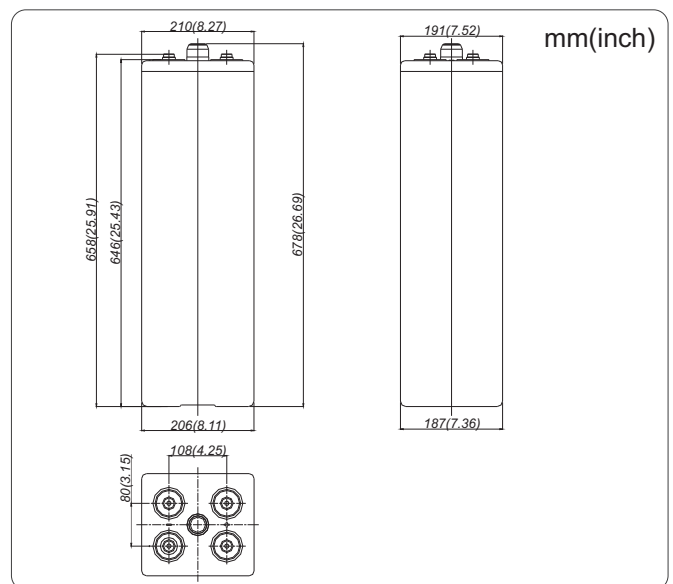
* - According to Eurobat (Long Life group)

** - Flame-retardant

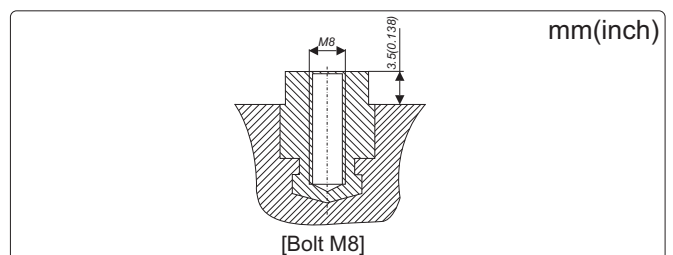
APPLICATIONS

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

DIMENSIONS



TERMINALS



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	409	311	171	143	122,7	106,0	85,3	70,9	31,9	17,7	9,5
1,85	479	389	192	154	131,9	114,7	94,1	78,9	34,7	18,9	10,3
1,80	570	418	198	159	136,3	118,7	96,8	80,0	35,9	19,9	10,6
1,75	623	440	203	163	139,4	121,9	99,2	82,5	36,7	20,2	11,0
1,70	647	453	207	165	141,8	124,3	10,1	83,7	37,5	20,5	11,3

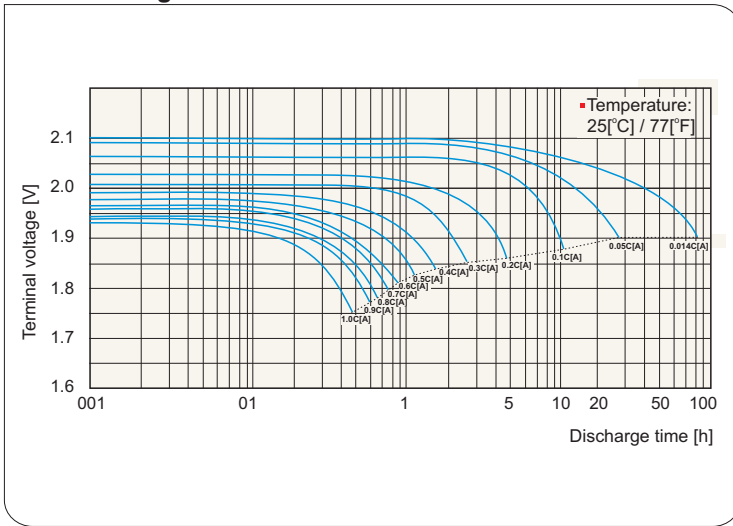
• Constant power (Power [W/cell], 25[°C] / 77[°F])

F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	1011	679	466	377	290	252,0	202,5	168,0	141,3	91,2	62,0
1,85	1108	762	514	390	307	259,0	223,0	185,0	155,8	100,6	68,4
1,80	1153	819	534	410	323	266,1	233,0	194,0	162,5	105,0	71,3
1,75	1201	869	554	422	331	278,9	245,5	204,4	171,3	110,6	75,3
1,70	1251	923	570	433	344	289,1	250,0	207,8	174,5	112,7	76,4

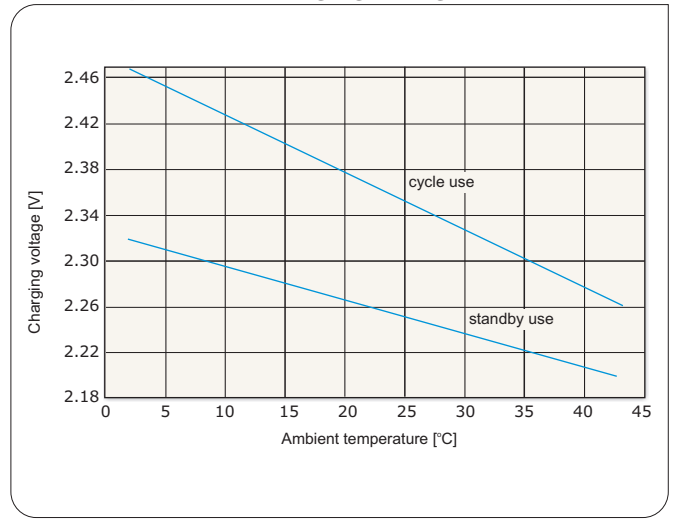
F.V. - Final voltage

8 OPzV 800

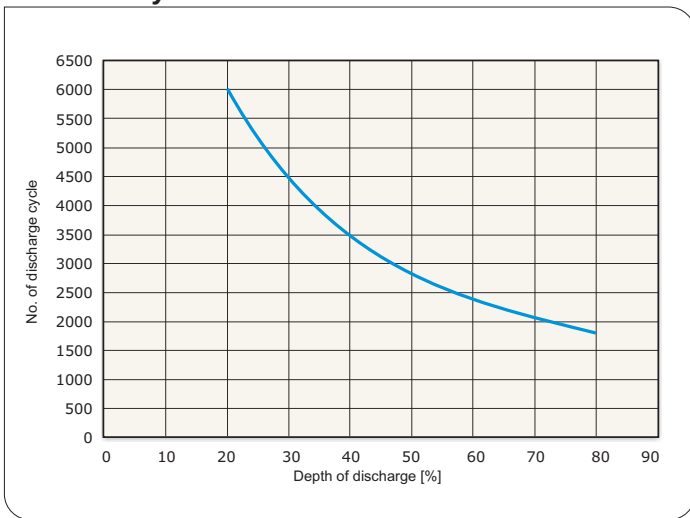
Cell discharge characteristics



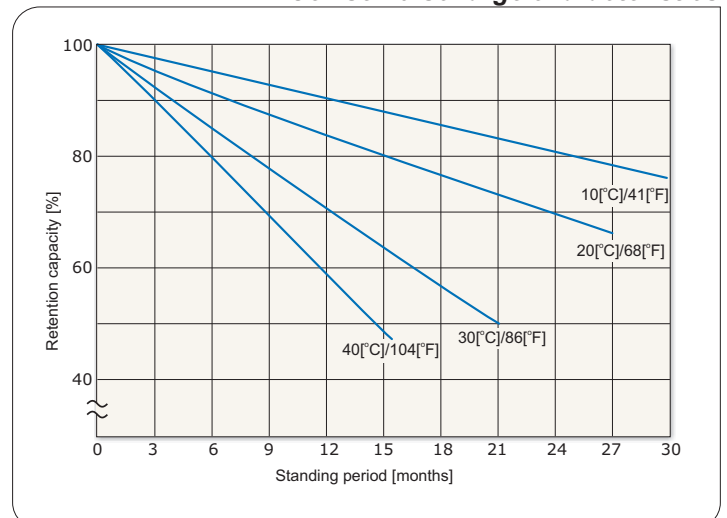
Relationship between charging voltage and temperature



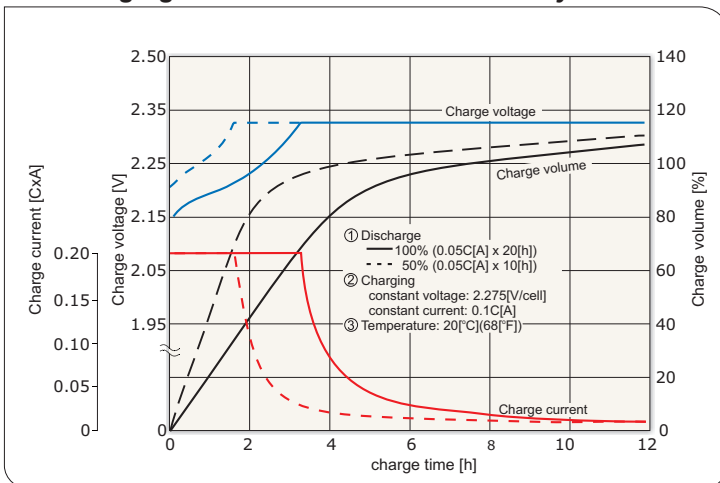
Cell life in cyclic use



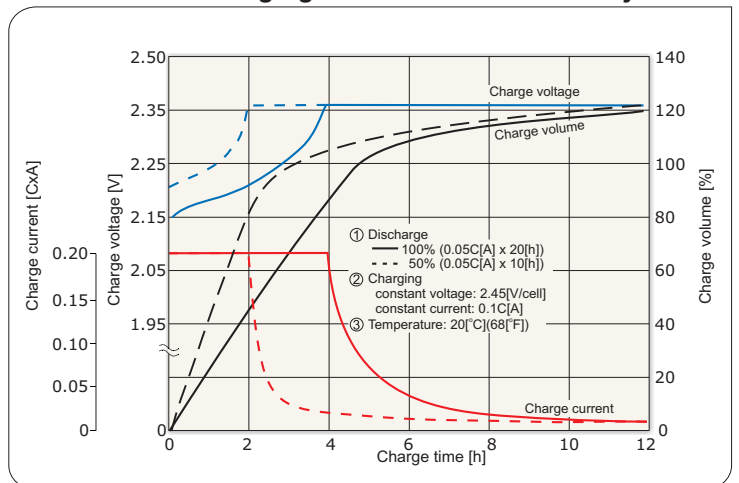
Cell self discharge characteristics



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

