

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.

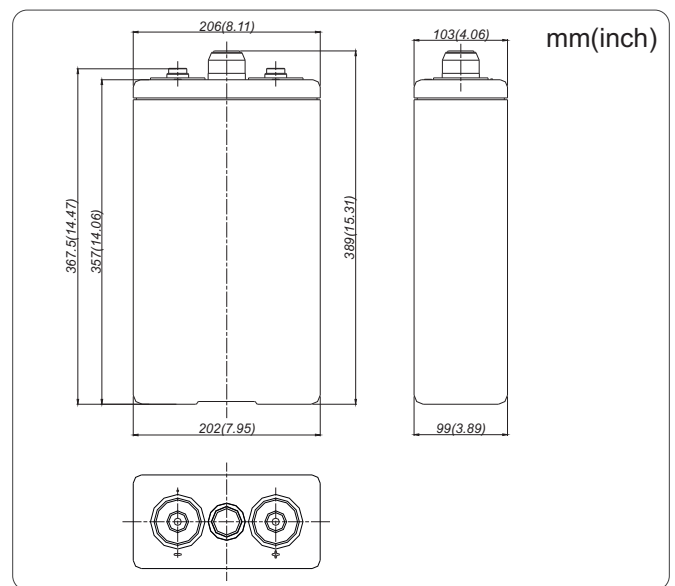
TECHNICAL DATA

Nominal voltage	2 V		
Nominal capacity	200 Ah / C ₁₀		
Cell per unit	1		
Technology	GEL		
Design life	over 20 years @ 20°C* over 18 years @ 25°C		
Dimensions	height	389,0 mm	
	length	103,0 mm	
	width	206,0 mm	
Weight	~20 kg		
Capacity @ 25°C	24h	9,01A @1,80V/cell	216,2 Ah
	10h	20,1A @1,80V/cell	201,0 Ah
	3h	50,9A @1,75V/cell	152,7 Ah
	1h	114A @1,70V/cell	114,0 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	≤0,939 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	20 A	
	maximum	50 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	

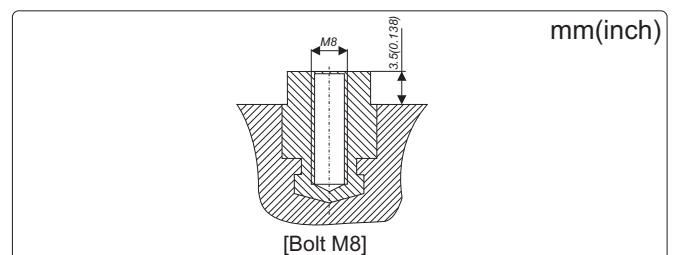
- Uninterruptible Power Supplies (UPS)
- Telecommunication power plants
- GSM base stations
- Substations
- Cable television
- Renewable energy sources

APPLICATIONS

DIMENSIONS



TERMINALS



*) - 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	103	78,0	43,0	36,0	30,8	26,6	21,4	17,8	8,00	4,4	2,4
1,85	120	97,6	48,1	38,7	33,1	28,8	23,6	19,8	8,71	4,7	2,6
1,80	143	105	49,7	39,9	34,2	29,8	24,3	20,1	9,01	5,0	2,7
1,75	156	110	50,9	40,8	35,0	30,6	24,9	20,7	9,21	5,1	2,8
1,70	162	114	52,0	41,5	35,6	31,2	25,4	21,0	9,41	5,1	2,8

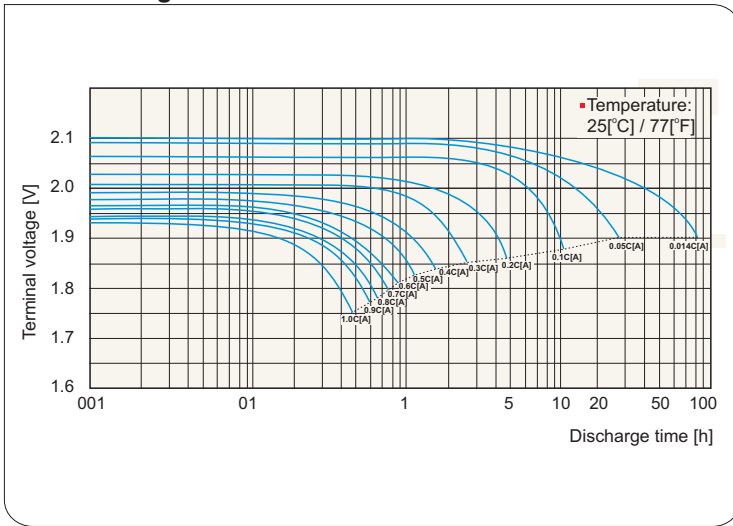
• Constant power (Power [W/cell], 25°C / 77°F)

F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	254	170	117	95	74	63,3	51,0	42,2	35,5	22,9	15,6
1,85	278	191	129	98	77	65,0	56,0	46,4	39,1	25,2	17,2
1,80	289	206	134	103	81	66,8	58,5	48,9	40,8	26,3	17,9
1,75	301	218	139	106	83	70,0	61,6	51,3	43,0	27,7	18,9
1,70	314	232	143	109	86	72,6	62,5	52,2	43,8	28,3	19,2

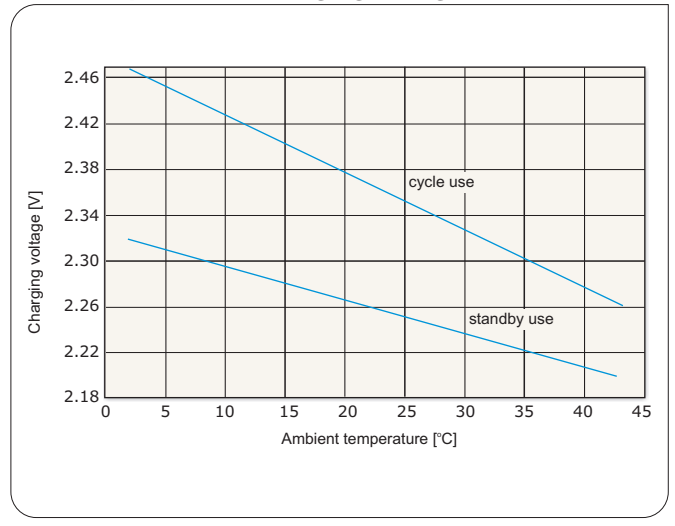
F.V. - Final voltage

4 OPzV 200

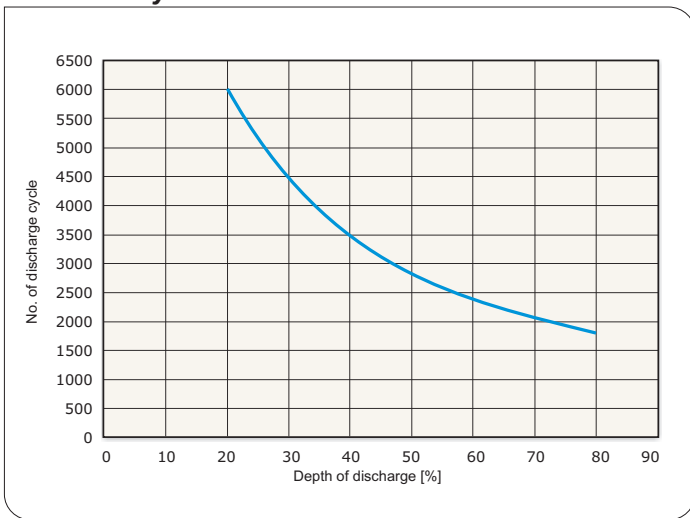
Cell discharge characteristics



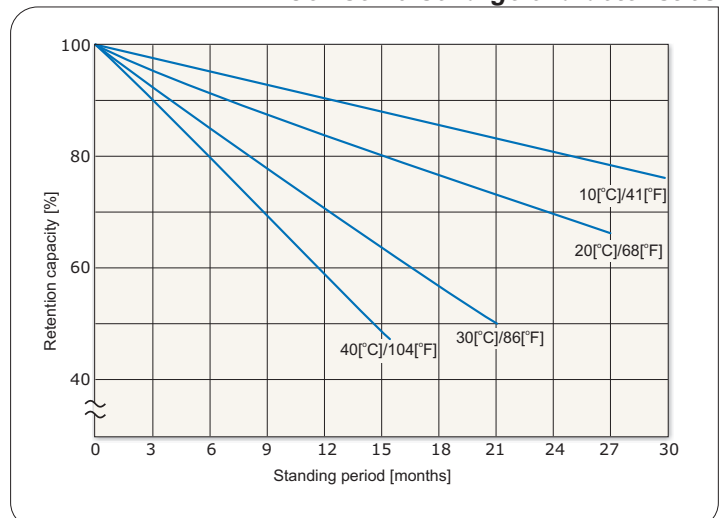
Relationship between charging voltage and temperature



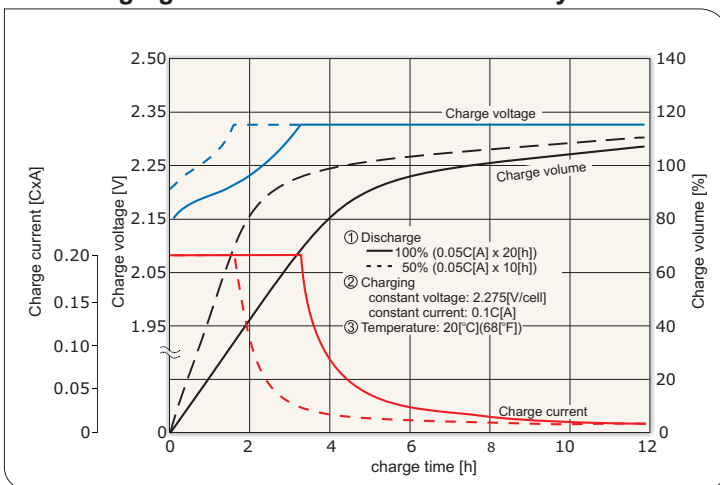
Cell life in cyclic use



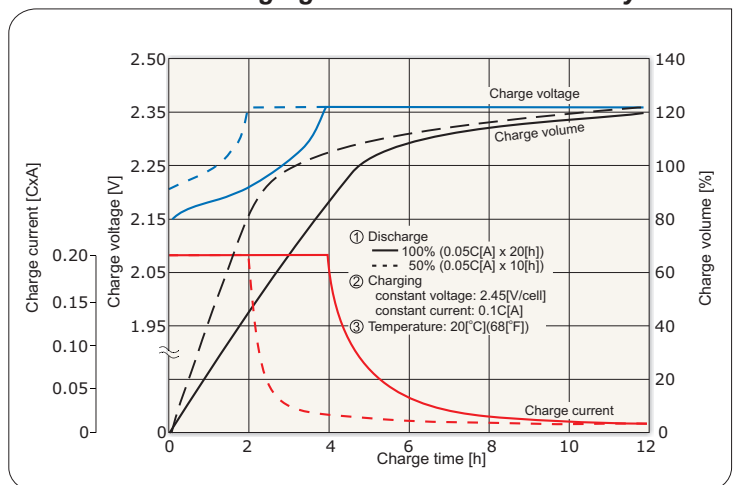
Cell self discharge characteristics



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

