

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	2500 Ah / C ₁₀		
Cell per unit	1		
Technology	GEL		
Design life	over 20 years @ 20°C* over 18 years @ 25°C		
Dimensions	height	802,0 mm	
	length	487,0 mm	
	width	212,0 mm	
Weight	~192 kg		
Capacity @ 25°C	24h	111A @1,80V/cell	2664,0 Ah
	10h	250A @1,80V/cell	2500,0 Ah
	3h	360A @1,75V/cell	1890,0 Ah
	1h	1406A @1,70V/cell	1406,0 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	≤0,126 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	250 A	
	maximum	625 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	1270	965	632	445	381	328	265	220	99	54	29
1,85	1488	1208	595	478	410	356	292	245	107	58	32
1,80	1770	1300	615	493	423	368	301	250	111	61	33
1,75	1935	1365	630	505	433	378	307	256	113	62	34
1,70	2010	1406	643	513	440	386	313	260	116	63	35

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

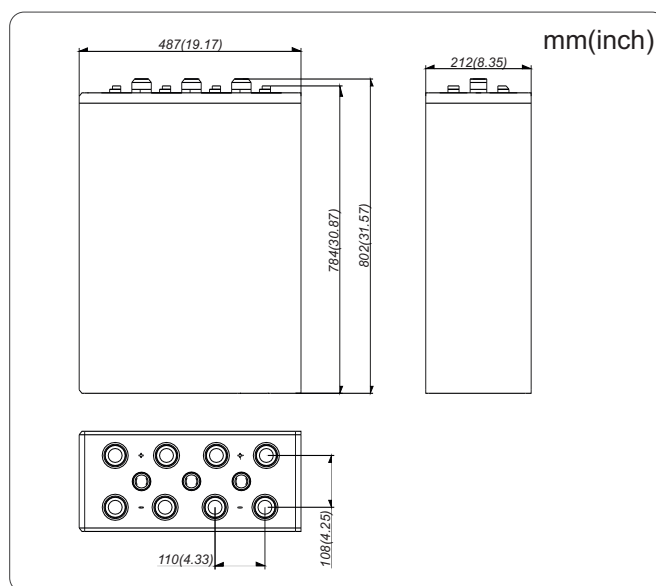
F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	3139	2108	1448	1171	903	783	629	521	439	283	193
1,85	3440	2368	1596	1213	953	804	694	575	484	313	212
1,80	3580	2545	1659	1275	1003	827	724	600	505	326	222
1,75	3729	2698	1720	1311	1028	866	763	635	532	344	234
1,70	3866	2868	1770	1345	1069	898	778	645	542	350	237

F.V. - Final voltage

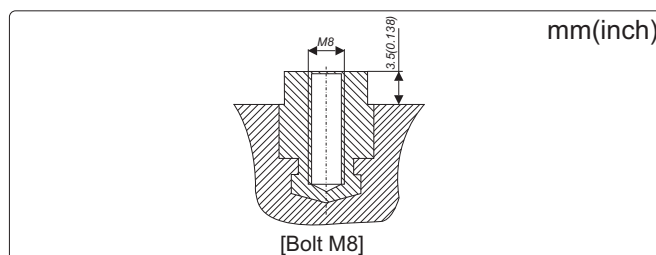
APPLICATIONS

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

DIMENSIONS

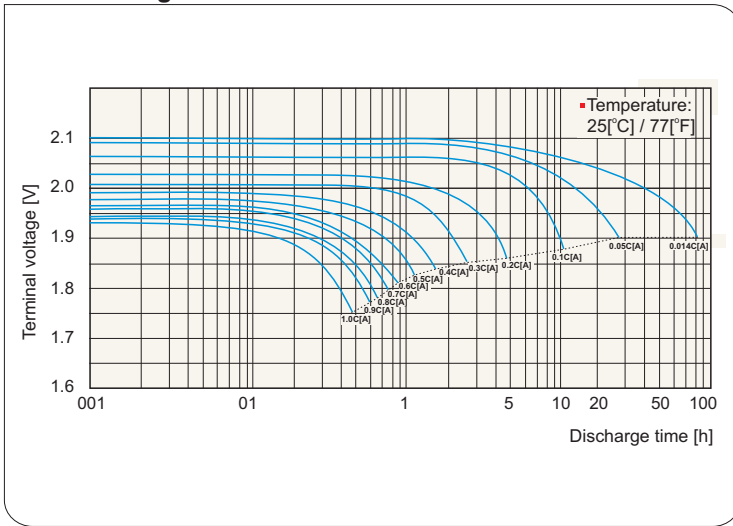


TERMINALS

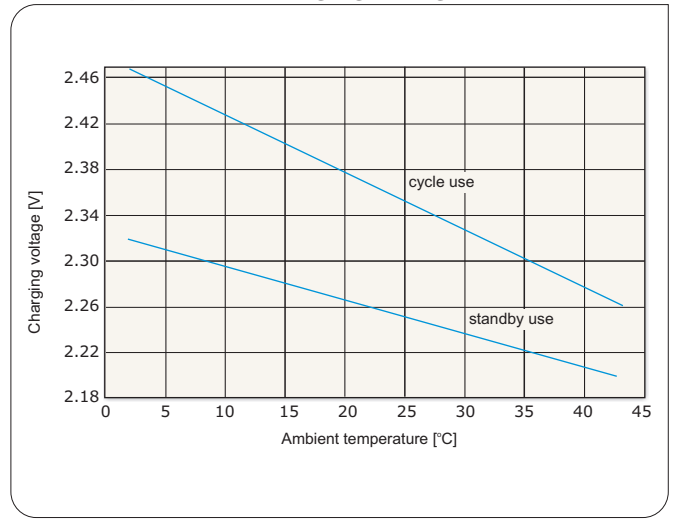


20 OPzV 2500

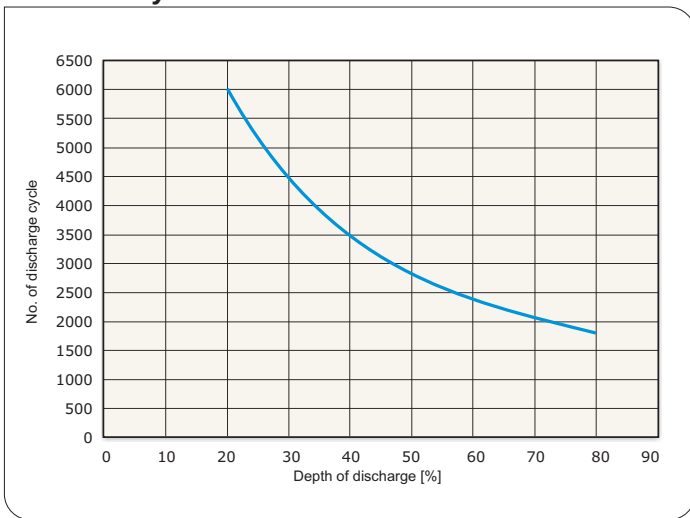
Cell discharge characteristics



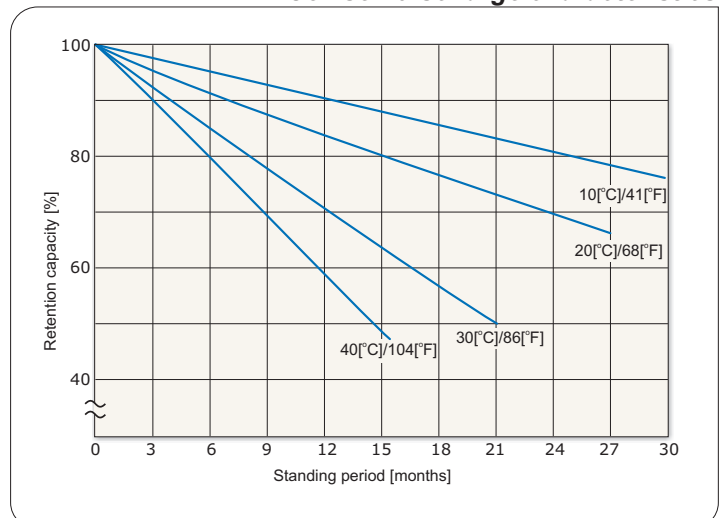
Relationship between charging voltage and temperature



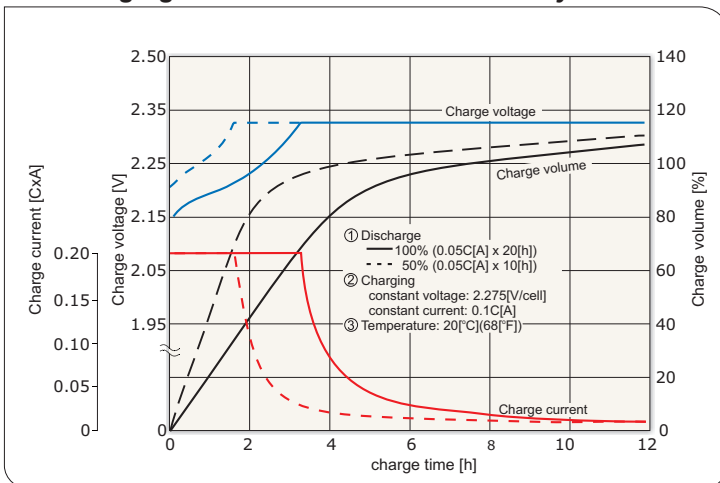
Cell life in cyclic use



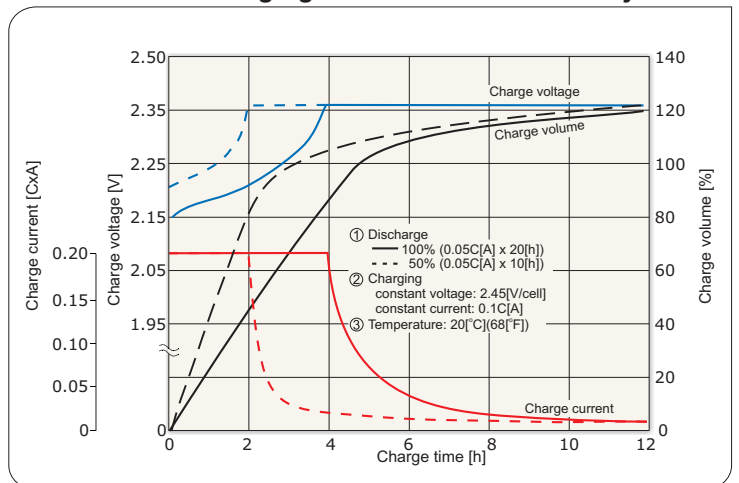
Cell self discharge characteristics



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

