

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	300 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	145,0 mm
	width	206,0 mm
Weight	~28 kg	
Capacity @ 25°C	24h 13,5A @1,80V/cell	324,0 Ah
	10h 30,1A @1,80V/cell	301,0 Ah
	3h 76,0A @1,75V/cell	228,0 Ah
	1h 170A @1,70V/cell	170,0 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	≤0,615 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	30 A
	maximum	75 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	154	117	65	54	46,2	39,9	32,1	26,7	12,0	6,7	3,6
1,85	181	146	72	58	49,7	43,2	35,4	29,7	13,1	7,1	3,9
1,80	215	158	75	60	51,3	44,7	36,5	30,1	13,5	7,5	4,0
1,75	235	166	76	61	52,5	45,9	37,3	31,1	13,8	7,6	4,1
1,70	244	170	78	62	53,4	46,8	38,1	31,5	14,1	7,7	4,3

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

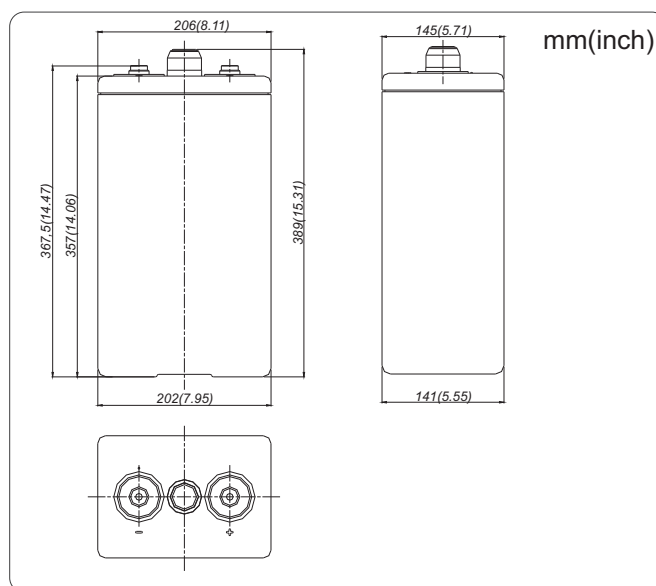
F.V. V/cell	Discharge time										
	30 min	1h	2h	3h	4h	5h	6h	8h	10h	16h	24h
1,90	381	256	176	142	111	94,6	76,3	63,2	53,2	34,3	23,3
1,85	417	287	194	147	116	97,5	84,1	69,7	58,7	37,9	25,8
1,80	434	309	201	155	122	100,2	87,7	73,4	61,2	39,5	26,9
1,75	452	327	209	159	125	105,0	93,2	77,0	64,5	41,6	28,4
1,70	471	348	215	163	130	108,9	95,3	78,2	65,7	42,4	28,8

F.V. - Final voltage

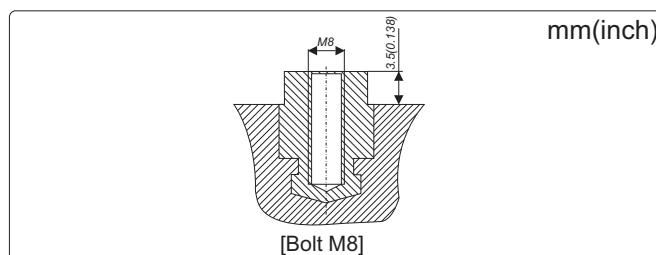
APPLICATIONS

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

DIMENSIONS

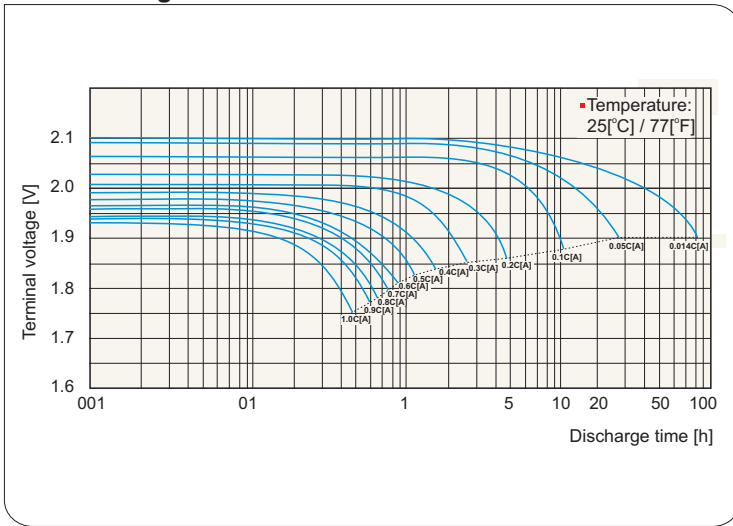


TERMINALS

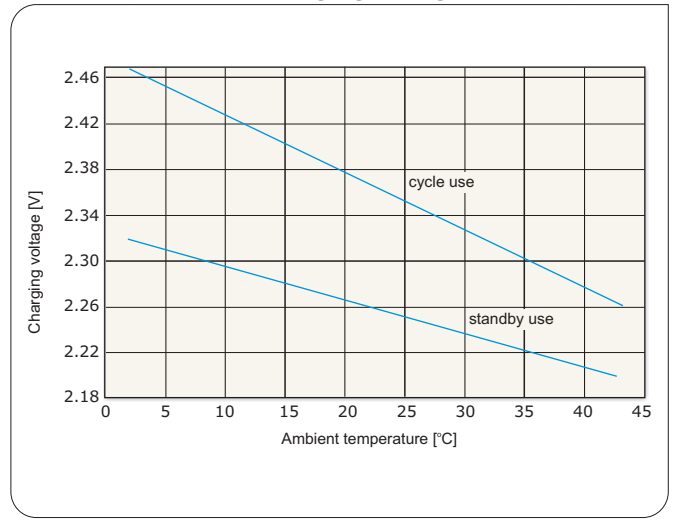


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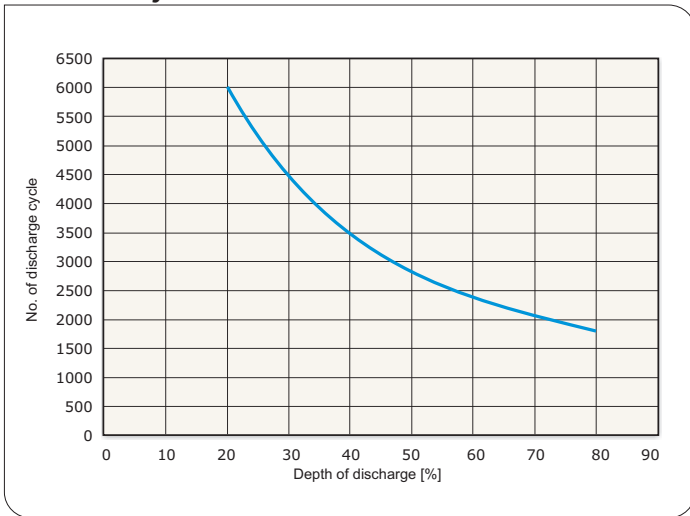
Cell discharge characteristics



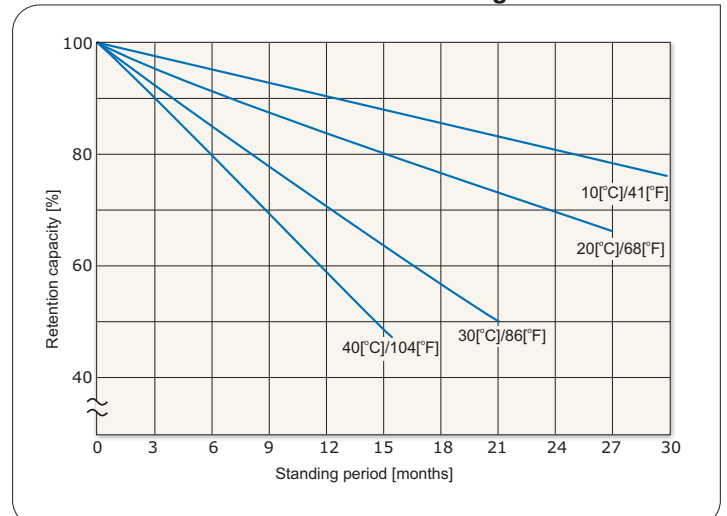
Relationship between charging voltage and temperature



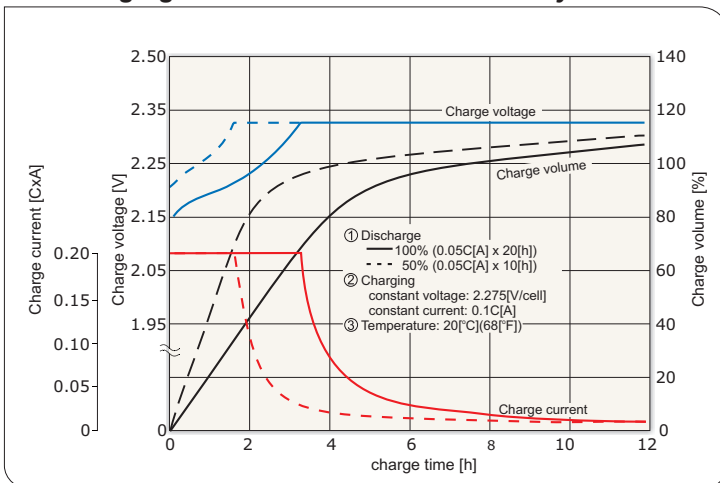
Cell life in cyclic use



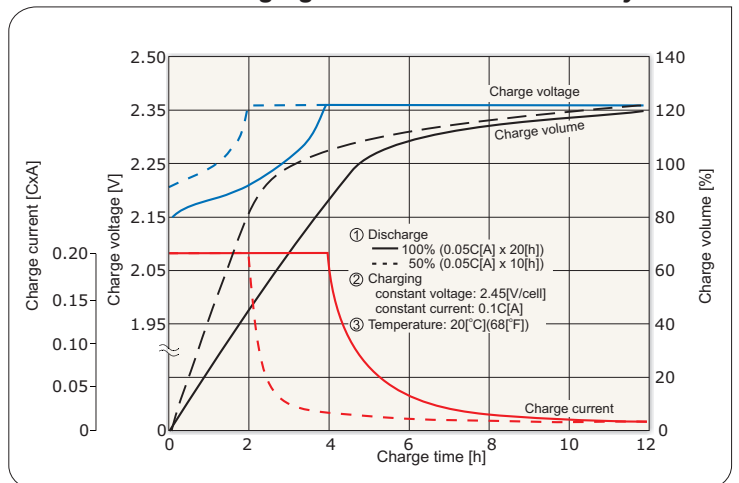
Cell self discharge characteristics



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

