

**5 OPzS 250**



Specification	
Float Charge	U = 2.23 V/cell ± 1%, between 10°C and 30°C $\Delta U/\Delta T = -0.004$ V/K below 10°C in the monthly average
Boost Charge	U = 2.35 to 2.40 V/cell, time limited
Dimension	Length 124 mm Width 206 mm Height 355 mm
Weight	Dry: 15.5 kg      Wet: 21.2 kg
Self Discharge	Approx. 2% per month at 20°C
Positive Electrode	Tubular plate with low antimony alloy (< 2 %)
Negative Electrode	Flat with long life expander active material
Separation	Microporous separator
Electrolyte	Sulphuric acid of 1.24 kg/l at 20°C
Container	High impact, transparent SAN
Lid	ABS (SAN)* in grey color
Blocks with Blind Cells	4V, 6V, 8V, 10V
Plugs	Ceramic plugs according to DIN 40740
Pole Sealing	100 % gas-and electrolytetight, sliding-pole
Connector	Flexible insulated copper cable with cross-section of 35, 50, 70, 95 or 120 mm <sup>2</sup> (35, 50 or 70 mm <sup>2</sup> )*
Kind of Protection	IP 25 regarding DIN 40050, touch protected according VBG 4
Reference Temperature	20°C at C10 (1.80 V/cell) and 25°C at C100 (1.85 V/cell)
Initial Capacity	100% Normally up to 80%
Depth of Discharge	More than 80% DOD or discharges beyond final discharge voltages (dependent on discharge current) have to be avoided

**Constant Current Discharge (Amperes) at 20°C (68°F)**

F.V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V/cell	114.0	102.6	83.6	60.0	48.2	40.5	35.3	32.1	26.1	23.0	11.5
1.87V/cell	146.5	123.3	96.3	68.8	54.5	45.4	39.1	34.3	28.4	24.3	12.4
1.83V/cell	180.7	148.6	110.8	76.2	59.5	49.6	42.3	36.7	29.9	25.6	12.7
1.80V/cell	206.4	165.3	119.6	80.9	62.7	52.1	44.5	38.8	31.0	25.9	14.5
1.75V/cell	242.8	184.9	129.6	85.4	65.6	53.5	45.2	38.9	31.4	26.4	14.8
1.70V/cell	267.6	204.5	138.0	87.2	66.6	53.8	46.7	40.3	32.3	26.6	14.9

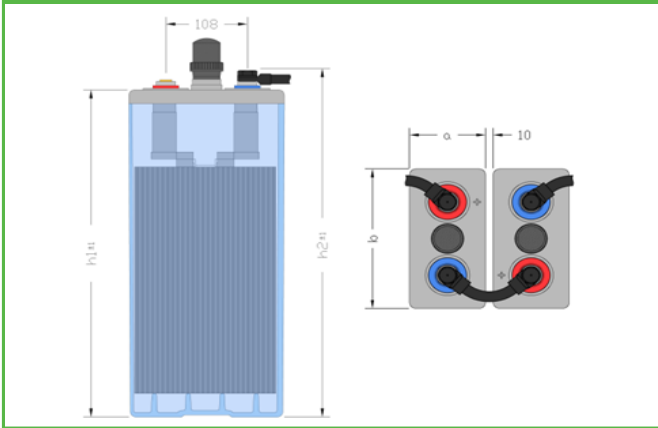
**Constant Power Discharge (Watts) at 20°C (68°F)**

F.V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V/cell	217.0	195.7	160.4	115.7	93.6	78.7	68.5	62.7	50.8	45.2	23.0
1.87V/cell	276.5	232.8	182.5	131.2	104.4	87.9	76.0	66.5	55.4	47.4	24.2
1.83V/cell	333.0	275.6	204.9	143.0	112.9	94.4	80.9	70.4	57.7	49.5	24.9
1.80V/cell	376.3	301.8	220.1	150.6	117.6	98.2	84.1	73.8	59.5	49.6	28.5
1.75V/cell	432.7	333.6	235.9	157.7	122.2	100.2	85.1	73.3	59.9	50.3	28.9
1.70V/cell	464.6	364.2	248.9	160.2	122.8	100.3	87.6	75.9	59.9	50.6	28.3

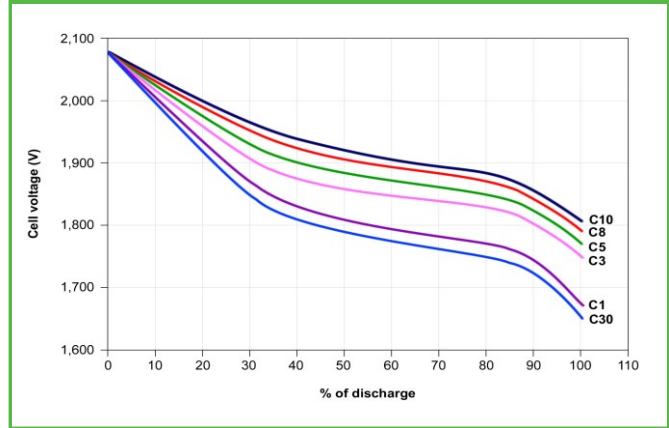


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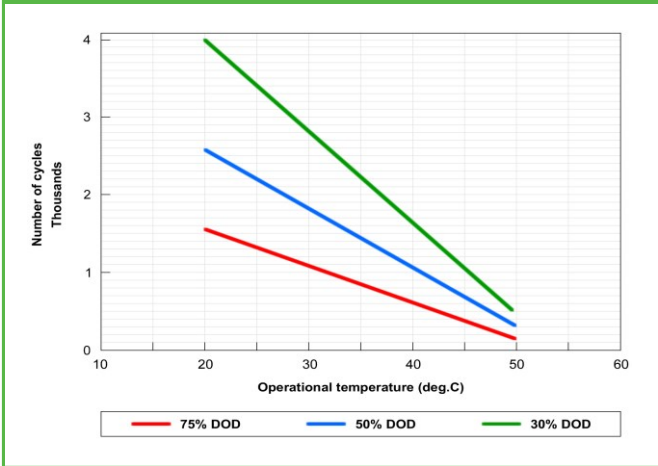
**Dimension**



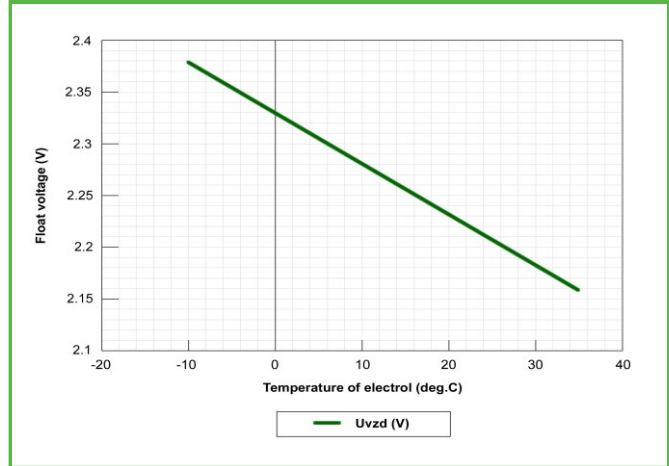
**Voltage vs. % of discharge at Cx**



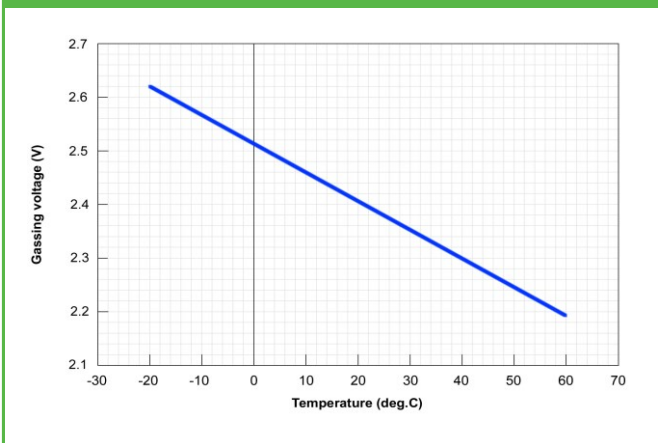
**Lifetime in cycles vs. temperature at DOD**



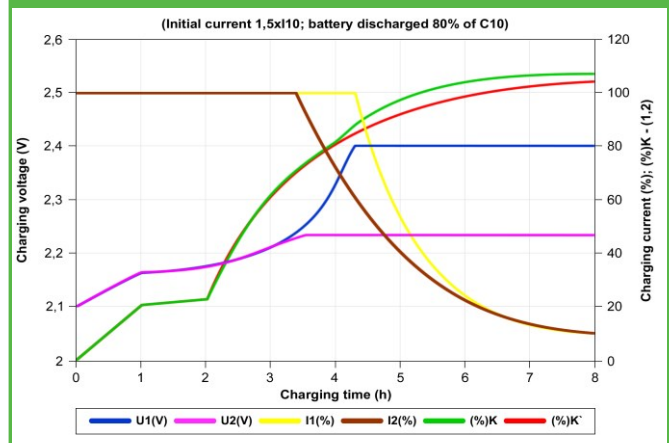
**Float voltage as f (T)**



**Gassing voltage as f (T)**



**Charging of OPzS cells with IU charger**



ETL SEMKO

