

**6 OPzS 420**



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 145 mm Width 206 mm Height 471 mm
Weight	Dry: 24.5 kg      Wet: 33.7 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

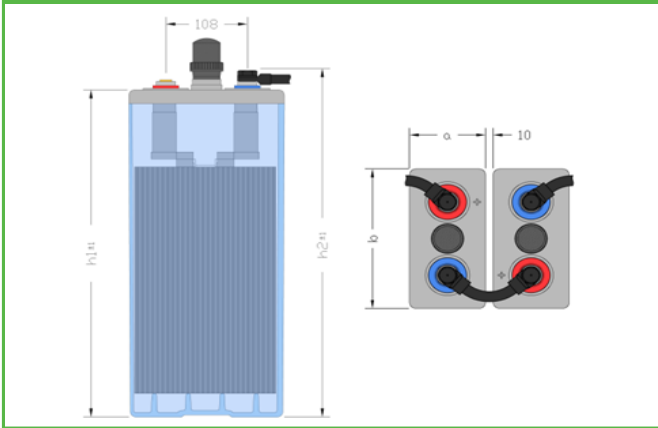
Constant Current Discharge (Amperes) at 20°C (68°F)											
F.V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V/cell	155.9	151.4	135.9	100.1	80.6	67.0	58.8	52.6	44.2	39.4	23.4
1.87V/cell	210.4	192.0	155.5	115.3	91.9	76.2	66.5	57.9	48.9	41.3	23.6
1.83V/cell	262.1	229.5	182.4	129.3	102.0	84.4	73.3	63.4	52.3	44.0	24.8
1.80V/cell	298.4	257.2	198.3	137.7	107.8	88.7	77.1	66.7	54.4	45.4	25.0
1.75V/cell	353.1	291.0	218.0	147.6	112.0	91.6	78.6	67.1	55.4	46.5	25.7
1.70V/cell	400.2	320.5	234.4	149.7	113.8	92.2	80.8	69.7	57.0	46.2	25.6

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	296.7	288.9	260.7	193.2	156.5	130.3	114.3	102.8	86.1	77.7	46.5
1.87V/cell	397.1	362.4	294.7	220.1	176.2	147.5	129.2	112.2	95.1	80.8	46.4
1.83V/cell	483.1	425.8	337.5	242.7	193.5	160.5	140.0	121.7	101.0	85.1	48.6
1.80V/cell	544.1	469.7	365.1	256.5	202.3	167.2	145.8	126.8	104.5	87.0	49.0
1.75V/cell	629.2	524.9	397.0	272.3	208.6	171.6	148.1	126.5	105.6	88.5	50.2
1.70V/cell	694.7	570.7	422.9	275.0	210.0	171.8	151.6	131.3	57.0	87.6	48.6

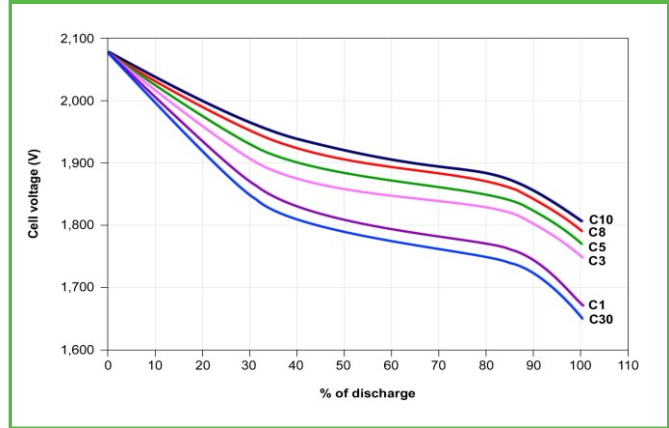


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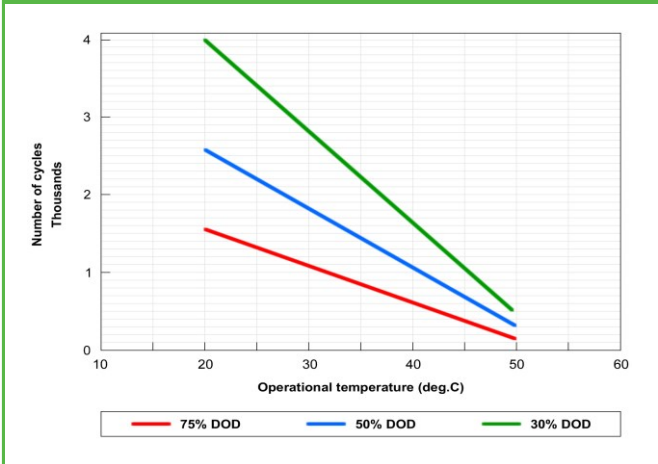
**Dimension**



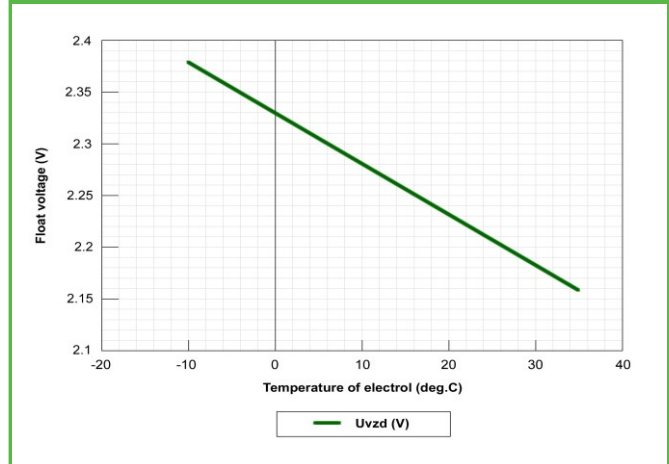
**Voltage vs. % of discharge at Cx**



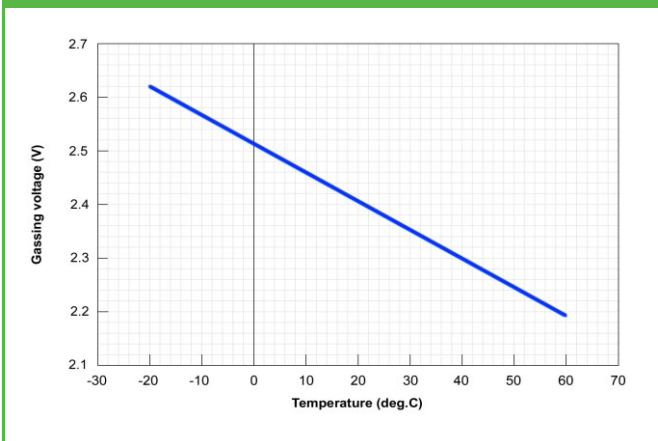
**Lifetime in cycles vs. temperature at DOD**



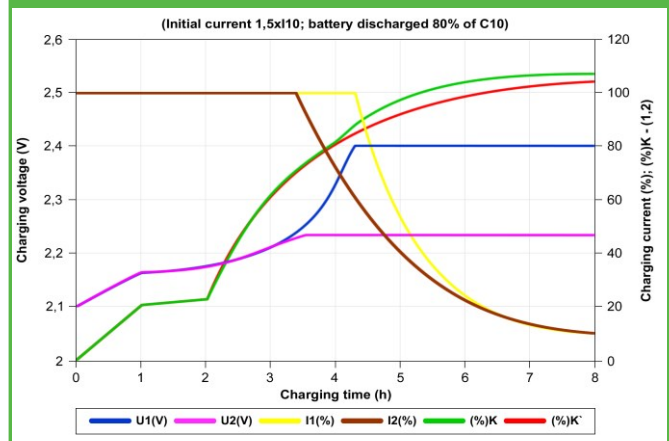
**Float voltage as f (T)**



**Gassing voltage as f (T)**



**Charging of OPzS cells with IU charger**



ETL SEMKO

