

**20 OPzS 2500**



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 487 mm Width 212 mm Height 772 mm
Weight	Dry: 138.2 kg      Wet: 192.5 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	647.6	633.6	612.6	530.4	436.3	381.5	332.2	296.6	245.0	211.4	133.8
1.87V/cell	868.8	818.6	775.1	608.8	496.8	428.1	376.7	333.3	277.3	236.9	135.7
1.83V/cell	1110.4	1058.7	926.2	712.4	570.8	481.1	419.9	367.2	304.2	256.8	142.6
1.80V/cell	1325.2	1240.5	1035.9	778.8	615.6	514.9	446.6	388.1	319.2	267.5	150.7
1.75V/cell	1608.3	1457.8	1177.9	853.5	662.8	547.3	471.3	400.9	329.7	275.1	154.6
1.70V/cell	1964.9	1702.8	1292.5	903.9	688.6	560.7	485.4	416.2	339.6	277.8	156.1

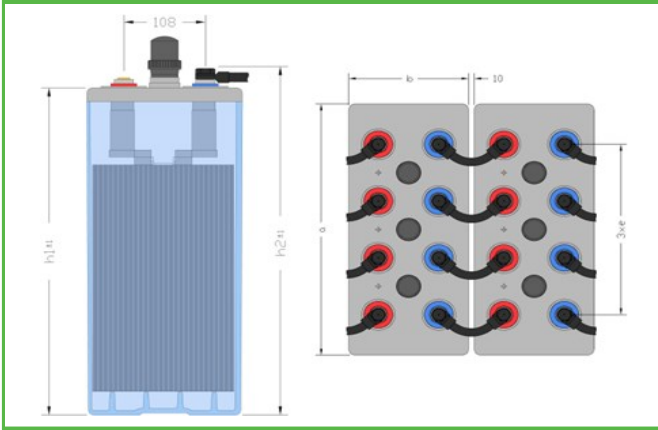
**Constant Power Discharge (Watts) at 20°C (68°F)**

F.V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V/cell	1232.4	1208.9	1175.0	1023.6	846.8	742.0	645.8	579.2	477.8	416.3	266.2
1.87V/cell	1639.4	1545.4	1468.7	1161.6	952.3	828.4	731.5	646.5	540.0	463.1	266.1
1.83V/cell	2046.5	1963.8	1713.4	1337.2	1082.8	915.0	802.1	705.0	587.4	496.7	279.6
1.80V/cell	2415.8	2265.2	1907.1	1450.2	1155.5	970.5	844.6	737.8	613.2	513.1	295.3
1.75V/cell	2866.0	2629.9	2144.9	1574.7	1234.1	1025.0	888.0	756.1	629.2	523.6	301.7
1.70V/cell	3411.0	3032.7	2331.7	1660.5	1270.5	1044.5	911.1	784.2	639.6	526.9	296.8

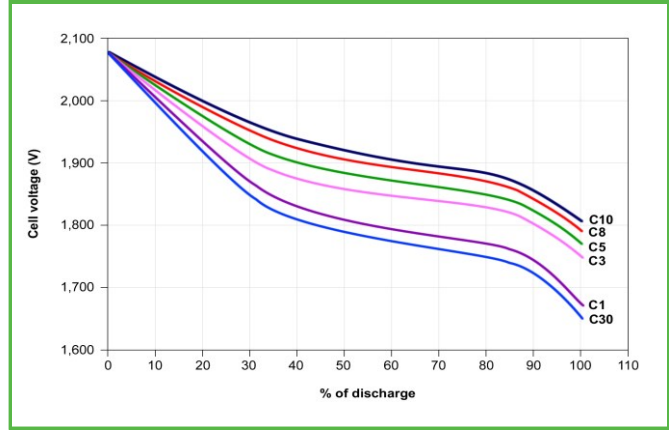


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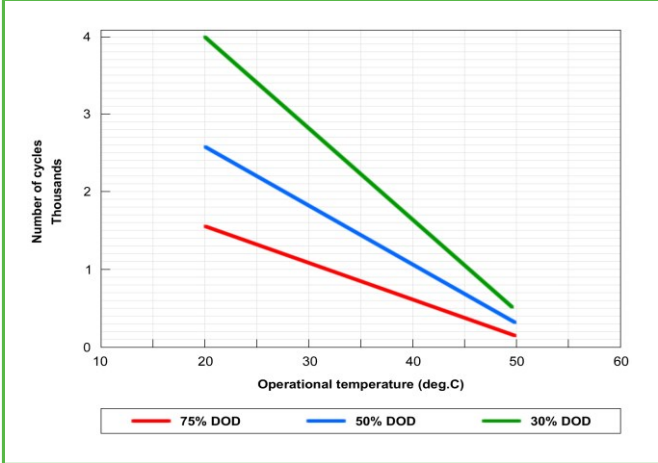
**Dimension**



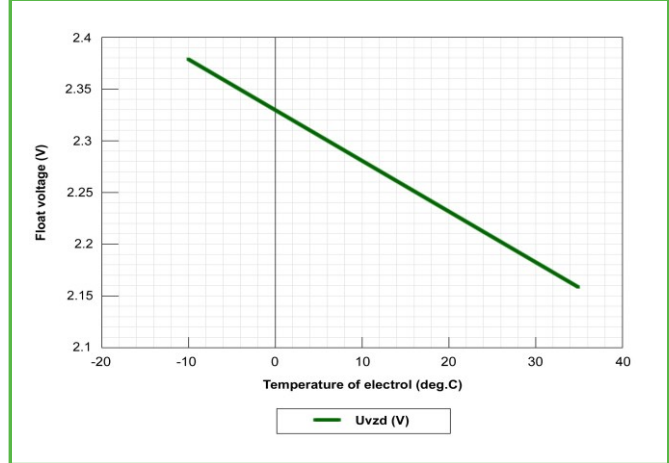
**Voltage vs. % of discharge at Cx**



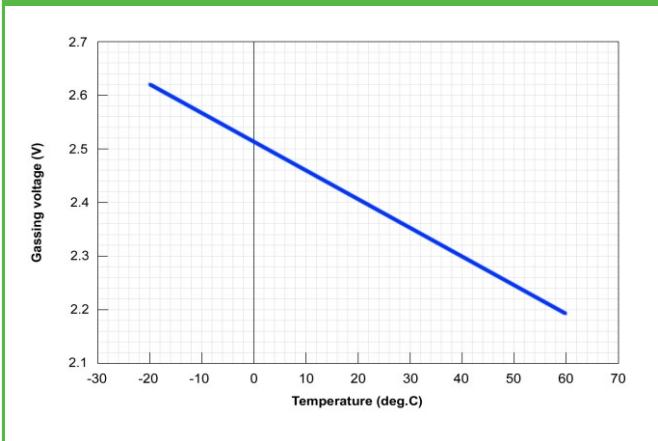
**Lifetime in cycles vs. temperature at DOD**



**Float voltage as f (T)**



**Gassing voltage as f (T)**



**Charging of OPzS cells with IU charger**

