

**8 OPzS 800**



**Specification**

|                         |  |
|-------------------------|--|
| Float Charge            | U = 2.23 V/cell ± 1%, between 10°C and 30°C<br>ΔU/ΔT = -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 191 mm<br>Width 210 mm<br>Height 646 mm   |
| Weight                  | Dry: 46.8 kg      Wet: 63.5 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%<br>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 | 258.2 | 251.5 | 232.6 | 182.5 | 148.9 | 126.7 | 109.8 | 98.6  | 81.4  | 71.0 | 42.9 |
| 1.87V/cell | 338.5 | 320.8 | 272.8 | 209.4 | 170.0 | 144.3 | 125.3 | 108.4 | 90.3  | 77.9 | 44.4 |
| 1.83V/cell | 430.2 | 372.6 | 321.5 | 238.5 | 189.2 | 158.9 | 136.6 | 118.0 | 98.2  | 83.1 | 46.0 |
| 1.80V/cell | 446.3 | 444.4 | 357.0 | 256.0 | 201.7 | 167.4 | 143.8 | 123.2 | 102.2 | 85.3 | 47.1 |
| 1.75V/cell | 610.7 | 514.0 | 405.7 | 277.1 | 212.7 | 174.1 | 147.1 | 123.8 | 102.7 | 86.8 | 47.8 |
| 1.70V/cell | 697.4 | 577.2 | 435.0 | 290.1 | 218.2 | 176.8 | 152.0 | 128.7 | 105.8 | 87.9 | 48.2 |

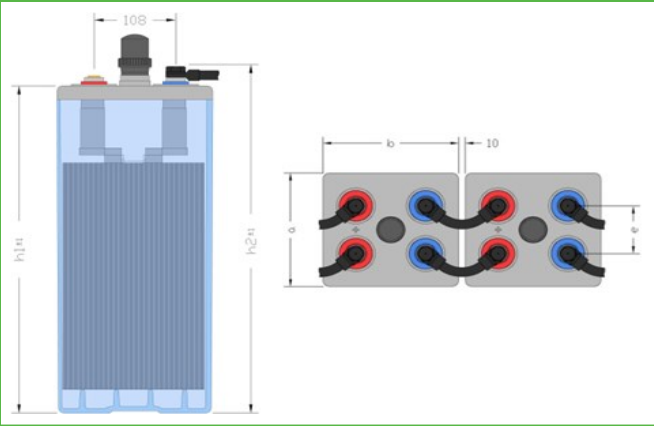
**Constant Power Discharge (Watts) at 20°C (68°F)**

| F.V/Time   | 15min  | 30min  | 1h    | 2h    | 3h    | 4h    | 5h    | 6h    | 8h    | 10h   | 20h  |
|------------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.90V/cell | 491.4  | 479.8  | 446.0 | 352.3 | 289.0 | 246.5 | 213.5 | 192.6 | 158.7 | 139.9 | 85.3 |
| 1.87V/cell | 638.8  | 605.6  | 517.0 | 399.6 | 325.9 | 279.2 | 243.4 | 210.4 | 175.8 | 152.3 | 87.0 |
| 1.83V/cell | 792.9  | 691.1  | 594.7 | 447.7 | 358.9 | 302.1 | 260.8 | 226.6 | 189.7 | 160.7 | 90.1 |
| 1.80V/cell | 813.6  | 811.5  | 657.3 | 476.7 | 378.5 | 315.6 | 271.8 | 234.2 | 196.4 | 163.5 | 92.3 |
| 1.75V/cell | 1088.3 | 927.2  | 738.8 | 511.3 | 396.1 | 326.2 | 277.1 | 233.5 | 196.0 | 165.3 | 93.4 |
| 1.70V/cell | 1210.7 | 1028.0 | 784.7 | 532.9 | 402.6 | 329.4 | 285.3 | 242.5 | 105.8 | 166.8 | 91.6 |

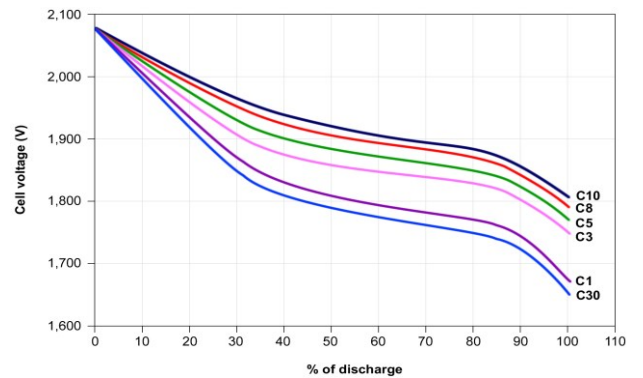


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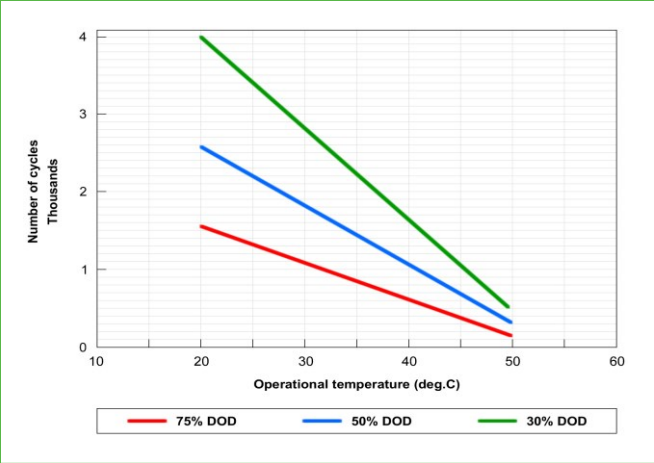
**Dimension**



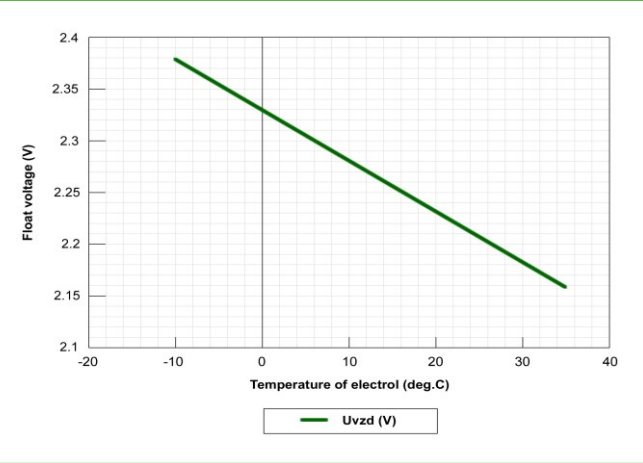
**Voltage vs. % of discharge at Cx**



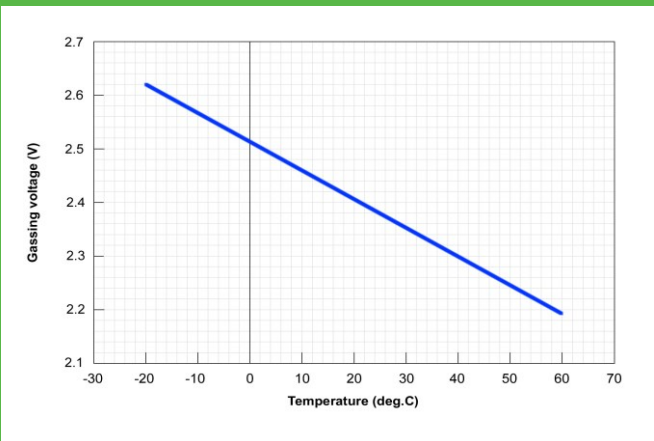
**Lifetime in cycles vs. temperature at DOD**



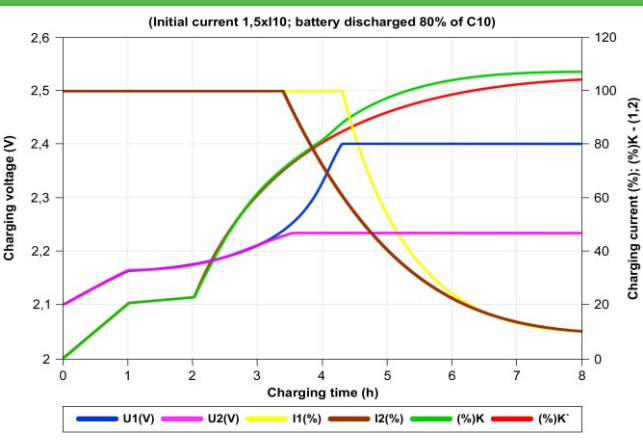
**Float voltage as f (T)**



**Gassing voltage as f (T)**



**Charging of OPzS cells with IU charger**



ETL SEMKO

