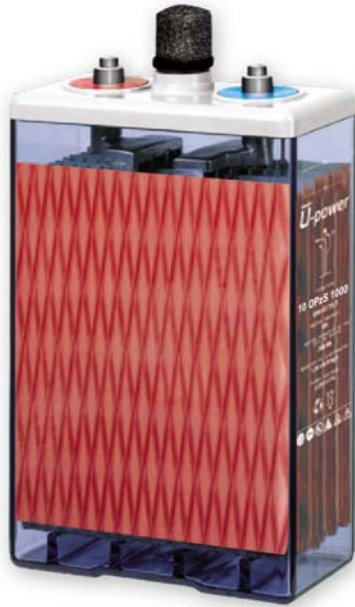


10 OPzS 1000



Specification

Float Charge	U = 2.23 V/cell ± 1%, between 10°C and 30°C 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 210 mm Width 233 mm Height 711 mm
Weight	Dry: 57 kg Wet: 80 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 ² (35, 50 or 70 mm ²)*
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	323.0	314.5	290.6	228.3	185.8	158.1	137.2	123.0	101.6	89.0	53.5
1.87V/cell	420.2	398.7	339.0	261.6	211.9	179.5	156.5	135.1	112.6	96.9	55.5
1.83V/cell	533.7	487.9	400.2	297.9	236.0	198.2	170.1	146.9	122.5	103.5	57.4
1.80V/cell	637.0	552.5	444.2	319.2	251.5	208.7	179.5	154.1	127.6	106.5	58.6
1.75V/cell	756.6	639.3	504.4	345.3	265.4	217.2	183.9	155.0	128.3	108.7	59.5
1.70V/cell	864.5	718.0	540.7	361.2	272.2	221.0	189.8	161.1	132.1	110.0	60.2

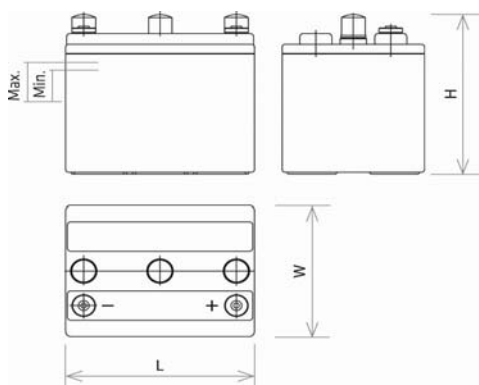
Constant Power Discharge (Watts) at 20°C (68°F)

F.V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V/cell	614.6	600.0	557.3	440.7	360.6	307.5	266.7	240.2	198.1	175.2	106.4
1.87V/cell	792.8	752.7	642.4	499.2	406.3	347.3	304.0	262.1	219.2	189.5	108.7
1.83V/cell	983.6	905.0	740.3	559.2	447.7	377.0	324.9	282.1	236.6	200.1	112.6
1.80V/cell	1161.2	1008.8	817.7	594.4	472.1	393.4	339.4	292.9	245.2	204.3	114.8
1.75V/cell	1348.2	1153.3	918.6	637.1	494.1	406.9	346.5	292.3	244.8	206.9	116.2
1.70V/cell	1500.8	1278.7	975.4	663.5	502.2	411.6	356.2	303.5	244.8	208.8	114.5

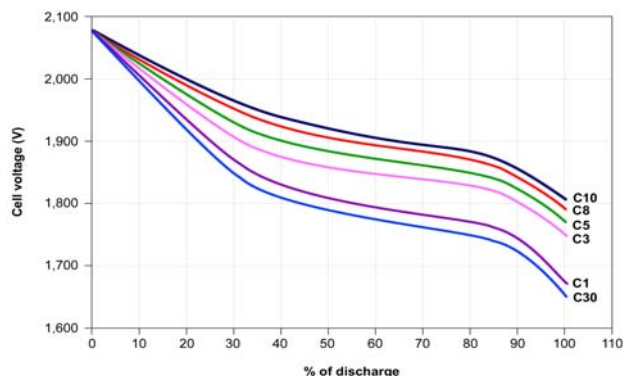


10 OPzS 1000

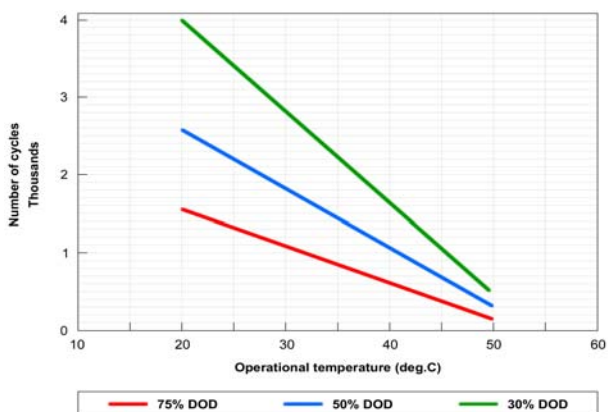
Dimension



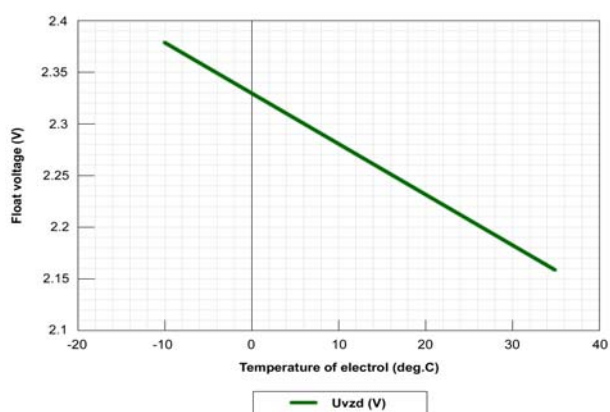
Voltage vs. % of discharge at Cx



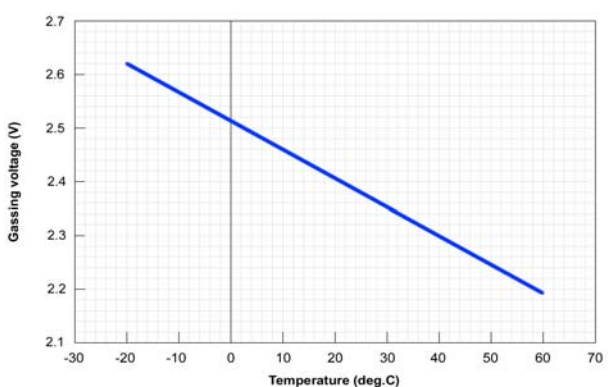
Lifetime in cycles vs. temperature at DOD



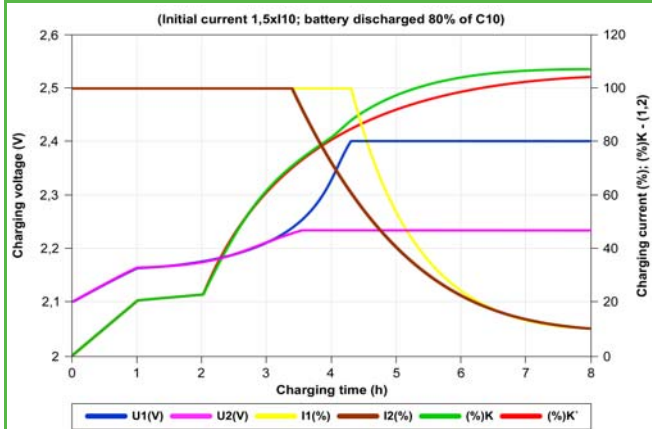
Float voltage as f (T)



Gassing voltage as f (T)



Charging of OPzS cells with IU charger



ETL SEMKO

