

Portable Dissolved Oxygen Meter - Part#: MW-600

ALTITUDE & SALINITY COMPENSATION:

If the sample contains salts or if you are performing the measurements at altitude different from sea level, the readout values must be corrected, taking into account the lower degree of oxygen solubility. Altitude Compensation: All the readouts are referred to sea level, thus the displayed measurements are higher than the actual values. In fact, altitude affects D.O. concentration by decreasing its value. The table below reports the oxygen solubility at various temperatures and altitudes, based on sea level barometric pressure of 760 mmHg. This gives an idea of the error that can be introduced at different altitudes and allows you to calculate the quantity to be subtracted to correct the reading.

Altitude, Meters above Sea Level								
°C	0 m	300 m	600 m	900 m	1200 m	1500 m	1800 m	°F
0	14.6	14.1	13.6	13.2	12.7	12.3	11.8	32.0
2	13.8	13.3	12.9	12.4	12.0	11.6	11.2	35.6
4	13.1	12.7	12.2	11.9	11.4	11.0	10.6	39.2
6	12.4	12.0	11.6	11.2	10.8	10.4	10.1	42.8
8	11.8	11.4	11.0	10.6	10.3	9.9	9.6	46.4
10	11.3	10.9	10.5	10.2	9.8	9.5	9.2	50.0
12	10.8	10.4	10.1	9.7	9.4	9.1	8.8	53.6
14	10.3	9.9	9.6	9.3	9.0	8.7	8.3	57.2
16	9.9	9.7	9.2	8.9	8.6	8.3	8.0	60.8
18	9.5	9.2	8.7	8.6	8.3	8.0	7.7	64.4
20	9.1	8.8	8.5	8.2	7.9	7.7	7.4	68.0
22	8.7	8.4	8.1	7.8	7.7	7.3	7.1	71.6
24	8.4	8.1	7.8	7.5	7.3	7.1	6.8	75.2
26	8.1	7.8	7.5	7.3	7.0	6.8	6.6	78.8
28	7.8	7.5	7.3	7.0	6.8	6.6	6.3	82.4
30	7.5	7.2	7.0	6.8	6.5	6.3	6.1	86.0
32	7.3	7.1	6.8	6.6	6.4	6.1	5.9	89.6
34	7.1	6.9	6.6	6.4	6.2	6.0	5.8	93.2
36	6.8	6.6	6.3	6.1	5.9	5.7	5.5	96.8
38	6.6	6.4	6.2	5.9	5.7	5.6	5.4	100.4
40	6.4	6.2	6.0	5.8	5.6	5.4	5.2	104.4



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