$Ug \simeq 1\,mV$

Temperature compensation for measuring and calibration

Analyte: H2S
Sensor: 10120117
Range: 50 mg/l

Temperature °C	ET
0	2,1324
1	2,0453
2	1,9623
3	1,8831
4	1,8077
5	1,7360
6	1,6678
7	1,6029
8	1,5412
9	1,4826
10	1,4270
11	1,3741
12	1,3239
13	1,2762
14	1,2309
15	1,1878
16	1,1468
17	1,1078
18	1,0706
19	1,0350
20	1,0000
21	0,9684
22	0,9371
23	0,9068
24	0,8776
25	0,8491
26	0,8214
27	0,7942
28	0,7675
29	0,7410
30	0,7146

Slope:

a20 = 0,083678 mg/lmV

H2S concentration:

$C1 = a20 \times (U - Ug) \times ET$ (1 mV)

Total sulphide concentration:

$C2 = C1 \times G$

Calibration:

$a20 = aT / ET$

C1 - H2S concentration
a20 - slope at 20°C
U - Ug - measured voltage - voltage at 0 mg/l H2S
ET - temperature compensation factor
aT - slope at calibration temperature
C2 - total sulphide concentration
G - total sulphide calculation factor

$ET = 2{,}132424E{+}00 + (-8{,}918868E{-}02 \times T) + (2{,}097641E{-}03 \times T^2) + (-2{,}333399E{-}05 \times T^3)$ T = [°C]