

Термопара платино-палладиевая Pt/Pd

Стандартная зависимость ТЭДС от температуры

(при температуре холодного спая 0 °С)

мкВ											
t_{90} / °С	0	1	2	3	4	5	6	7	8	9	t_{90} / °С
0	0.0	5.3	10.6	15.9	21.3	26.6	31.9	37.3	42.7	48.0	0
10	53.4	58.8	64.2	69.6	75.0	80.5	85.9	91.3	96.8	102.2	10
20	107.7	113.2	118.7	124.2	129.7	135.2	140.7	146.2	151.7	157.3	20
30	162.8	168.4	173.9	179.5	185.1	190.7	196.3	201.9	207.5	213.1	30
40	218.7	224.3	230.0	235.6	241.3	246.9	252.6	258.3	264.0	269.7	40
50	275.4	281.1	286.8	292.5	298.2	303.9	309.7	315.4	321.2	326.9	50
60	332.7	338.5	344.3	350.1	355.9	361.7	367.5	373.3	379.1	384.9	60
70	390.8	396.6	402.5	408.3	414.2	420.1	425.9	431.8	437.7	443.6	70
80	449.5	455.4	461.3	467.3	473.2	479.1	485.1	491.0	497.0	502.9	80
90	508.9	514.9	520.9	526.9	532.9	538.9	544.9	550.9	556.9	562.9	90
100	569.0	575.0	581.1	587.1	593.2	599.3	605.3	611.4	617.5	623.6	100
110	629.7	635.8	641.9	648.1	654.2	660.3	666.5	672.6	678.8	684.9	110
120	691.1	697.3	703.5	709.7	715.9	722.1	728.3	734.5	740.7	746.9	120
130	753.2	759.4	765.7	771.9	778.2	784.5	790.7	797.0	803.3	809.6	130
140	815.9	822.2	828.6	834.9	841.2	847.6	853.9	860.3	866.6	873.0	140
150	879.4	885.8	892.2	898.6	905.0	911.4	917.8	924.2	930.7	937.1	150
160	943.6	950.0	956.5	962.9	969.4	975.9	982.4	988.9	995.4	1001.9	160
170	1008.5	1015.0	1021.5	1028.1	1034.6	1041.2	1047.8	1054.4	1060.9	1067.5	170
180	1074.1	1080.7	1087.4	1094.0	1100.6	1107.3	1113.9	1120.6	1127.2	1133.9	180
190	1140.6	1147.3	1154.0	1160.7	1167.4	1174.1	1180.9	1187.6	1194.4	1201.1	190
200	1207.9	1214.7	1221.4	1228.2	1235.0	1241.8	1248.7	1255.5	1262.3	1269.2	200
210	1276.0	1282.9	1289.7	1296.6	1303.5	1310.4	1317.3	1324.2	1331.2	1338.1	210
220	1345.0	1352.0	1358.9	1365.9	1372.9	1379.9	1386.9	1393.9	1400.9	1407.9	220
230	1415.0	1422.0	1429.1	1436.1	1443.2	1450.3	1457.4	1464.5	1471.6	1478.7	230
240	1485.9	1493.0	1500.2	1507.3	1514.5	1521.7	1528.9	1536.1	1543.3	1550.5	240
250	1557.7	1565.0	1572.2	1579.5	1586.8	1594.1	1601.4	1608.7	1616.0	1623.3	250
260	1630.7	1638.0	1645.4	1652.7	1660.1	1667.5	1674.9	1682.3	1689.7	1697.2	260
270	1704.6	1712.1	1719.6	1727.0	1734.5	1742.0	1749.5	1757.1	1764.6	1772.2	270
280	1779.7	1787.3	1794.9	1802.5	1810.1	1817.7	1825.3	1833.0	1840.6	1848.3	280
290	1856.0	1863.6	1871.3	1879.1	1886.8	1894.5	1902.3	1910.0	1917.8	1925.6	290
300	1933.4	1941.2	1949.0	1956.8	1964.7	1972.5	1980.4	1988.3	1996.2	2004.1	300
310	2012.0	2019.9	2027.9	2035.9	2043.8	2051.8	2059.8	2067.8	2075.8	2083.9	310
320	2091.9	2100.0	2108.1	2116.2	2124.3	2132.4	2140.5	2148.6	2156.8	2165.0	320
330	2173.1	2181.3	2189.5	2197.8	2206.0	2214.2	2222.5	2230.8	2239.1	2247.4	330
340	2255.7	2264.0	2272.4	2280.7	2289.1	2297.5	2305.9	2314.3	2322.7	2331.2	340
350	2339.6	2348.1	2356.6	2365.1	2373.6	2382.1	2390.7	2399.2	2407.8	2416.4	350
360	2425.0	2433.6	2442.2	2450.9	2459.5	2468.2	2476.9	2485.6	2494.3	2503.1	360
370	2511.8	2520.6	2529.3	2538.1	2546.9	2555.8	2564.6	2573.5	2582.3	2591.2	370
380	2600.1	2609.0	2617.9	2626.9	2635.8	2644.8	2653.8	2662.8	2671.8	2680.9	380
390	2689.9	2699.0	2708.1	2717.2	2726.3	2735.4	2744.6	2753.7	2762.9	2772.1	390

$t_{90} / ^\circ\text{C}$	0	1	2	3	4	5	6	7	8	9	$t_{90} / ^\circ\text{C}$
400	2781.3	2790.5	2799.8	2809.0	2818.3	2827.6	2836.9	2846.2	2855.6	2864.9	400
410	2874.3	2883.7	2893.1	2902.5	2911.9	2921.4	2930.8	2940.3	2949.8	2959.3	410
420	2968.9	2978.4	2988.0	2997.6	3007.2	3016.8	3026.4	3036.0	3045.7	3055.4	420
430	3065.1	3074.8	3084.5	3094.3	3104.1	3113.8	3123.6	3133.5	3143.3	3153.1	430
440	3163.0	3172.9	3182.8	3192.7	3202.6	3212.6	3222.6	3232.5	3242.6	3252.6	440
450	3262.6	3272.7	3282.7	3292.8	3302.9	3313.1	3323.2	3333.4	3343.5	3353.7	450
460	3363.9	3374.2	3384.4	3394.7	3405.0	3415.3	3425.6	3435.9	3446.3	3456.6	460
470	3467.0	3477.4	3487.9	3498.3	3508.8	3519.2	3529.7	3540.2	3550.8	3561.3	470
480	3571.9	3582.5	3593.1	3603.7	3614.3	3625.0	3635.7	3646.4	3657.1	3667.8	480
490	3678.5	3689.3	3700.1	3710.9	3721.7	3732.5	3743.4	3754.3	3765.2	3776.1	490
500	3787.0	3797.9	3808.9	3819.9	3830.9	3841.9	3853.0	3864.0	3875.1	3886.2	500
510	3897.3	3908.4	3919.6	3930.7	3941.9	3953.1	3964.3	3975.6	3986.8	3998.1	510
520	4009.4	4020.7	4032.1	4043.4	4054.8	4066.2	4077.6	4089.0	4100.5	4111.9	520
530	4123.4	4134.9	4146.4	4158.0	4169.5	4181.1	4192.7	4204.3	4215.9	4227.6	530
540	4239.3	4250.9	4262.7	4274.4	4286.1	4297.9	4309.7	4321.5	4333.3	4345.1	540
550	4357.0	4368.9	4380.8	4392.7	4404.6	4416.6	4428.5	4440.5	4452.5	4464.6	550
560	4476.6	4488.7	4500.8	4512.9	4525.0	4537.1	4549.3	4561.5	4573.7	4585.9	560
570	4598.1	4610.4	4622.7	4635.0	4647.3	4659.6	4672.0	4684.3	4696.7	4709.1	570
580	4721.6	4734.0	4746.5	4759.0	4771.5	4784.0	4796.5	4809.1	4821.7	4834.3	580
590	4846.9	4859.5	4872.2	4884.9	4897.6	4910.3	4923.0	4935.8	4948.5	4961.3	590
600	4974.1	4987.0	4999.8	5012.7	5025.6	5038.5	5051.4	5064.4	5077.3	5090.3	600
610	5103.3	5116.3	5129.4	5142.4	5155.5	5168.6	5181.7	5194.9	5208.0	5221.2	610
620	5234.4	5247.6	5260.8	5274.1	5287.4	5300.6	5314.0	5327.3	5340.6	5354.0	620
630	5367.4	5380.8	5394.2	5407.7	5421.1	5434.6	5448.1	5461.6	5475.2	5488.7	630
640	5502.3	5515.9	5529.5	5543.1	5556.8	5570.5	5584.2	5597.9	5611.6	5625.4	640
650	5639.1	5652.9	5666.7	5680.6	5694.4	5708.3	5722.1	5736.0	5750.0	5763.9	650
660	5777.9	5791.8	5805.8	5819.9	5833.9	5848.0	5862.0	5876.1	5890.2	5904.4	660
670	5918.5	5932.7	5946.9	5961.1	5975.3	5989.5	6003.8	6018.1	6032.4	6046.7	670
680	6061.1	6075.4	6089.8	6104.2	6118.6	6133.0	6147.5	6162.0	6176.4	6191.0	680
690	6205.5	6220.0	6234.6	6249.2	6263.8	6278.4	6293.1	6307.7	6322.4	6337.1	690
700	6351.8	6366.5	6381.3	6396.1	6410.9	6425.7	6440.5	6455.3	6470.2	6485.1	700
710	6500.0	6514.9	6529.9	6544.8	6559.8	6574.8	6589.8	6604.9	6619.9	6635.0	710
720	6650.1	6665.2	6680.3	6695.5	6710.6	6725.8	6741.0	6756.2	6771.5	6786.7	720
730	6802.0	6817.3	6832.6	6847.9	6863.3	6878.7	6894.0	6909.4	6924.9	6940.3	730
740	6955.8	6971.2	6986.7	7002.3	7017.8	7033.3	7048.9	7064.5	7080.1	7095.7	740
750	7111.4	7127.0	7142.7	7158.4	7174.1	7189.9	7205.6	7221.4	7237.2	7253.0	750
760	7268.8	7284.7	7300.5	7316.4	7332.3	7348.2	7364.2	7380.1	7396.1	7412.1	760
770	7428.1	7444.1	7460.1	7476.2	7492.3	7508.4	7524.5	7540.6	7556.8	7572.9	770
780	7589.1	7605.3	7621.5	7637.8	7654.0	7670.3	7686.6	7702.9	7719.3	7735.6	780
790	7752.0	7768.3	7784.7	7801.2	7817.6	7834.0	7850.5	7867.0	7883.5	7900.0	790

$t_{90} / ^\circ\text{C}$	0	1	2	3	4	5	6	7	8	9	$t_{90} / ^\circ\text{C}$
800	7916.6	7933.1	7949.7	7966.3	7982.9	7999.5	8016.2	8032.9	8049.5	8066.2	800
810	8082.9	8099.7	8116.4	8133.2	8150.0	8166.8	8183.6	8200.4	8217.3	8234.2	810
820	8251.1	8268.0	8284.9	8301.8	8318.8	8335.8	8352.8	8369.8	8386.8	8403.8	820
830	8420.9	8438.0	8455.1	8472.2	8489.3	8506.5	8523.6	8540.8	8558.0	8575.2	830
840	8592.5	8609.7	8627.0	8644.3	8661.6	8678.9	8696.2	8713.6	8730.9	8748.3	840
850	8765.7	8783.1	8800.6	8818.0	8835.5	8853.0	8870.5	8888.0	8905.5	8923.1	850
860	8940.7	8958.3	8975.9	8993.5	9011.1	9028.8	9046.4	9064.1	9081.8	9099.5	860
870	9117.3	9135.0	9152.8	9170.6	9188.4	9206.2	9224.0	9241.9	9259.7	9277.6	870
880	9295.5	9313.4	9331.4	9349.3	9367.3	9385.3	9403.3	9421.3	9439.3	9457.4	880
890	9475.4	9493.5	9511.6	9529.7	9547.8	9566.0	9584.1	9602.3	9620.5	9638.7	890
900	9656.9	9675.2	9693.4	9711.7	9730.0	9748.3	9766.6	9784.9	9803.3	9821.6	900
910	9840.0	9858.4	9876.8	9895.3	9913.7	9932.2	9950.7	9969.1	9987.7	10006.2	910
920	10024.7	10043.3	10061.8	10080.4	10099.0	10117.7	10136.3	10154.9	10173.6	10192.3	920
930	10211.0	10229.7	10248.4	10267.2	10285.9	10304.7	10323.5	10342.3	10361.1	10379.9	930
940	10398.8	10417.6	10436.5	10455.4	10474.3	10493.3	10512.2	10531.2	10550.1	10569.1	940
950	10588.1	10607.1	10626.2	10645.2	10664.3	10683.3	10702.4	10721.5	10740.7	10759.8	950
960	10779.0	10798.1	10817.3	10836.5	10855.7	10874.9	10894.2	10913.4	10932.7	10952.0	960
970	10971.3	10990.6	11010.0	11029.3	11048.7	11068.0	11087.4	11106.8	11126.3	11145.7	970
980	11165.1	11184.6	11204.1	11223.6	11243.1	11262.6	11282.1	11301.7	11321.3	11340.8	980
990	11360.4	11380.0	11399.7	11419.3	11439.0	11458.6	11478.3	11498.0	11517.7	11537.4	990
1000	11557.2	11576.9	11596.7	11616.5	11636.3	11656.1	11675.9	11695.7	11715.6	11735.5	1000
1010	11755.3	11775.2	11795.1	11815.1	11835.0	11855.0	11874.9	11894.9	11914.9	11934.9	1010
1020	11954.9	11975.0	11995.0	12015.1	12035.2	12055.2	12075.3	12095.5	12115.6	12135.7	1020
1030	12155.9	12176.1	12196.3	12216.5	12236.7	12256.9	12277.2	12297.4	12317.7	12338.0	1030
1040	12358.3	12378.6	12398.9	12419.3	12439.6	12460.0	12480.3	12500.7	12521.2	12541.6	1040
1050	12562.0	12582.5	12602.9	12623.4	12643.9	12664.4	12684.9	12705.4	12726.0	12746.5	1050
1060	12767.1	12787.7	12808.3	12828.9	12849.5	12870.1	12890.8	12911.4	12932.1	12952.8	1060
1070	12973.5	12994.2	13014.9	13035.7	13056.4	13077.2	13098.0	13118.8	13139.6	13160.4	1070
1080	13181.2	13202.1	13222.9	13243.8	13264.7	13285.6	13306.5	13327.4	13348.4	13369.3	1080
1090	13390.3	13411.2	13432.2	13453.2	13474.2	13495.3	13516.3	13537.4	13558.4	13579.5	1090
1100	13600.6	13621.7	13642.8	13663.9	13685.1	13706.2	13727.4	13748.6	13769.8	13791.0	1100
1110	13812.2	13833.4	13854.7	13875.9	13897.2	13918.5	13939.8	13961.1	13982.4	14003.7	1110
1120	14025.1	14046.4	14067.8	14089.2	14110.6	14132.0	14153.4	14174.8	14196.3	14217.7	1120
1130	14239.2	14260.6	14282.1	14303.6	14325.2	14346.7	14368.2	14389.8	14411.3	14432.9	1130
1140	14454.5	14476.1	14497.7	14519.3	14541.0	14562.6	14584.3	14606.0	14627.7	14649.4	1140
1150	14671.1	14692.8	14714.5	14736.3	14758.0	14779.8	14801.6	14823.4	14845.2	14867.0	1150
1160	14888.8	14910.7	14932.5	14954.4	14976.3	14998.2	15020.1	15042.0	15063.9	15085.8	1160
1170	15107.8	15129.7	15151.7	15173.7	15195.7	15217.7	15239.7	15261.8	15283.8	15305.9	1170
1180	15327.9	15350.0	15372.1	15394.2	15416.3	15438.4	15460.6	15482.7	15504.9	15527.0	1180
1190	15549.2	15571.4	15593.6	15615.8	15638.1	15660.3	15682.6	15704.8	15727.1	15749.4	1190

$t_{90} / ^\circ\text{C}$	0	1	2	3	4	5	6	7	8	9	$t_{90} / ^\circ\text{C}$
1200	15771.7	15794.0	15816.3	15838.6	15861.0	15883.3	15905.7	15928.1	15950.5	15972.9	1200
1210	15995.3	16017.7	16040.1	16062.6	16085.0	16107.5	16130.0	16152.5	16175.0	16197.5	1210
1220	16220.0	16242.5	16265.1	16287.6	16310.2	16332.8	16355.4	16378.0	16400.6	16423.2	1220
1230	16445.9	16468.5	16491.2	16513.8	16536.5	16559.2	16581.9	16604.6	16627.3	16650.1	1230
1240	16672.8	16695.6	16718.3	16741.1	16763.9	16786.7	16809.5	16832.3	16855.2	16878.0	1240
1250	16900.9	16923.7	16946.6	16969.5	16992.4	17015.3	17038.2	17061.2	17084.1	17107.0	1250
1260	17130.0	17153.0	17176.0	17199.0	17222.0	17245.0	17268.0	17291.0	17314.1	17337.2	1260
1270	17360.2	17383.3	17406.4	17429.5	17452.6	17475.7	17498.9	17522.0	17545.2	17568.3	1270
1280	17591.5	17614.7	17637.9	17661.1	17684.3	17707.6	17730.8	17754.0	17777.3	17800.6	1280
1290	17823.9	17847.1	17870.4	17893.8	17917.1	17940.4	17963.8	17987.1	18010.5	18033.9	1290
1300	18057.2	18080.6	18104.0	18127.5	18150.9	18174.3	18197.8	18221.2	18244.7	18268.2	1300
1310	18291.7	18315.2	18338.7	18362.2	18385.7	18409.3	18432.8	18456.4	18480.0	18503.5	1310
1320	18527.1	18550.7	18574.3	18598.0	18621.6	18645.2	18668.9	18692.6	18716.2	18739.9	1320
1330	18763.6	18787.3	18811.0	18834.7	18858.5	18882.2	18906.0	18929.7	18953.5	18977.3	1330
1340	19001.1	19024.9	19048.7	19072.5	19096.4	19120.2	19144.1	19167.9	19191.8	19215.7	1340
1350	19239.6	19263.5	19287.4	19311.3	19335.3	19359.2	19383.2	19407.1	19431.1	19455.1	1350
1360	19479.1	19503.1	19527.1	19551.1	19575.1	19599.2	19623.2	19647.3	19671.4	19695.5	1360
1370	19719.5	19743.6	19767.8	19791.9	19816.0	19840.1	19864.3	19888.5	19912.6	19936.8	1370
1380	19961.0	19985.2	20009.4	20033.6	20057.8	20082.1	20106.3	20130.6	20154.8	20179.1	1380
1390	20203.4	20227.7	20252.0	20276.3	20300.6	20325.0	20349.3	20373.7	20398.0	20422.4	1390
1400	20446.8	20471.2	20495.6	20520.0	20544.4	20568.8	20593.3	20617.7	20642.2	20666.6	1400
1410	20691.1	20715.6	20740.1	20764.6	20789.1	20813.6	20838.2	20862.7	20887.3	20911.8	1410
1420	20936.4	20961.0	20985.6	21010.2	21034.8	21059.4	21084.0	21108.6	21133.3	21157.9	1420
1430	21182.6	21207.3	21232.0	21256.7	21281.4	21306.1	21330.8	21355.5	21380.2	21405.0	1430
1440	21429.7	21454.5	21479.3	21504.1	21528.9	21553.7	21578.5	21603.3	21628.1	21653.0	1440
1450	21677.8	21702.7	21727.5	21752.4	21777.3	21802.2	21827.1	21852.0	21876.9	21901.8	1450
1460	21926.8	21951.7	21976.7	22001.7	22026.6	22051.6	22076.6	22101.6	22126.6	22151.6	1460
1470	22176.7	22201.7	22226.8	22251.8	22276.9	22301.9	22327.0	22352.1	22377.2	22402.3	1470
1480	22427.4	22452.6	22477.7	22502.9	22528.0	22553.2	22578.3	22603.5	22628.7	22653.9	1480
1490	22679.1	22704.3	22729.6	22754.8	22780.0	22805.3	22830.5	22855.8	22881.1	22906.4	1490
1500	22931.7										1500

Зависимость ТЭДС от температуры для платино-палладиевой термопары

$$E = \sum_{i=0}^n a_i (t / ^\circ C)^i, \text{ мкВ}$$

Диапазон температуры	от 0 °С до 660.323 °С	от 660.323 °С до 1500 °С
Диапазон ТЭДС	от 0 до 5782.4 мкВ	от 5782.4 до 22 932 мкВ
$a_0 =$	0.000 000	-4.977 137 0E+02
$a_1 =$	5.296 958	1.018 254 5E+01
$a_2 =$	4.610 494E-03	-1.579 351 5E-02
$a_3 =$	-9.602 271E-06	3.636 170 0E-05
$a_4 =$	2.992 243E-08	-2.690 150 9E-08
$a_5 =$	-2.012 523E-11	9.562 736 6E-12
$a_6 =$	-1.268 514E-14	-1.357 073 7E-15
$a_7 =$	2.257 823E-17	
$a_8 =$	-8.510 068E-21	