

TPD-C PORTABLE CONTACT THERMOMETERS



TPD-C portable contact thermometer



TCT-P thermoelectric changeable transducer



Industrial application of TPD-C portable contact thermometers

Areas of Application

The thermometers are designed for contact measurements of temperature of solid bodies, liquids, and gaseous environments with the help of thermoelectric transducers; used in metallurgy, chemical, refractory, and other industries. For temperature control of metal melts the thermometers are complemented with thermoelectric changeable transducers TCT-P

Specification

Range of measurable temperature, °C	300 – 2500 (600 – 1700 with TCT-P)
Types of nominal static characteristics	A-1, A-2, A-3, L, K, S, B
Fundamental measurement error, %	≤0.2 (≤0.6 with TCT-P)
Number of immersions for TCT-P	≤20
Measurement time with TCT-P, s	5 – 10
Weight, kg	≤2

Advantages

The special algorithm of primary measurement data processing reduces the measurement time 3–4 times. This enables to increase the number of measurements by one TCT-P up to 20 (while the analogs are designed for 1–3 measurements) and to decrease the cost of temperature control

Stage of Development. Suggestions for Commercialization

IRL8, TRL8
Customized manufacture of thermometers and transducers, delivery, warranty service, and staff training, upon request

IPR Protection

IPR3

Contact Information

Anatoly V. Nariivskyi, Physico-Technological Institute of Metals and Alloys of the NAS of Ukraine; +38 044 424 35 15, e-mail: metal@ptima.kiev.ua