

NTM-RapidMaTch

The Calibration Source for Temperature Measurements You Can Trust!

General

The NTM-RapidMaTch is a standalone calibration source for in-situ calibration of radiation thermometers installed inside processing tools. It provides accurate, fast and reliable calibration of temperature probes operating in the near infrared band.

Just plug in the 24VDC power supply and after one minute the NTM-RapidMaTch is ready to calibrate. The rapid temperature stabilization saves time, while ensuring accurate calibration of in-situ probes within a tool, as well as accurate tool-to-tool matching.

The RapidMaTch calibration source achieves excellent short- and long-term stability due to the use of an optical feedback system which continuously monitors and controls the intensity of radiation emitted from the RapidMaTch aperture.

The RapidMaTch can be used as a standalone calibrator, using the embedded factory calibration. Alternately, the user-friendly software can be used by customers to match the RapidMaTch calibration curve to their own calibration reference source or master sensor.



Benefits-at-a-Glance

- Rapid warm up time (< 1 minute).</p>
- Ideal for tool matching.
- High accuracy and stability (Short and Long term).
- Large aperture for easy alignment.
- Customer can set radiation temperature in a wide dynamic range.
- Standalone, lightweight head.
- User friendly s/w for setting temperature and calibration with customer's master pyrometer.



Figure 1: Warm up time and Stability test. NTM-RapidMaTch is set to radiate at 800C.

Features

- Warm up time < 1 minute after power-on.</p>
- Ideal for tool matching.
- Long term stability < 0.5C.
- Large 18mm diameter aperture makes installation alignment easier.
- Wide dynamic range (600C to 950C)¹.
- Standalone, lightweight head unit does not require separate controller.
- Provided with PC control software for in-house calibration using master pyrometers.
- Optimized for the calibration of NTM-DeLTA radiation thermometers².

¹ Standard temperature range 600 to 950C. Lower temperature ranges available.
² Can be optimized for pyrometers operating at different near-infrared wavelengths.

