

Non-contact Infrared Temperature Measurement System — NCIT Plus Series



If temperature is a factor in your quality and manufacturing yield, then put this technology to work for you.

Design Features

- * 0° to 1000°F (-18 to 538°C)
- * Compact 1/8 DIN digital monitor with large 4-digit display
- * User-defined thermocouple or 4-20 mA output
- * Universal 110-220 VAC power input
- * Adjustable emissivity at ambient parameters
- * Adjustable dual setpoints and deadband alarm outputs
- * Choice of sensing head to match application
- * Standard and close focus optics available
- * Accessories for cooling and air purging
- * Field interchangeable sensing heads

Common Industrial Applications

- ▶ Plastics
- ▶ Paper & Pulp
- ▶ Chemicals
- ▶ Food Processing
- ▶ Pharmaceutical
- ▶ Electronics
- ▶ Construction
- ▶ Industrial Maintenance

Non-contact Temperature Measurement for Industrial Process

The NCIT Plus Series is a versatile two-piece temperature monitoring system that combines a compact, value-priced monitor with an infrared sensing head. The heart of the system is the 1/8 DIN NCIT Plus Monitor which provides advanced processing capabilities including peak and valley hold, averaging, and user-adjustable offset.

Advances in optical and electronic design, originally developed for high-end infrared systems, have been adapted to this low-cost line without compromise in performance when compared to infrared sensors that cost twice as much just a few years ago.

The **NCIT Plus** models can't scratch, tear, smear or contaminate because they don't make contact with your product. They are easier and safer to install and maintain because they can be positioned away from hot and hazardous processes and moving products.

They remain accurate over a longer period of time because they're not subjected to the abuse that a contact device receives. And they deliver much faster response time than contact thermocouples, while rivaling their accuracy and repeatability.

In the long run, non-contact temperature measurement can help you improve quality, speed production, and save money.

1/8 DIN NCIT Plus Monitor

Along with its large 4-digit LED display, the monitor provides a user-defined 4-20mA or thermocouple output. Two adjustable setpoints/deadbands control 5V alarm outputs or optional 3A mechanical relays. The **NCIT Plus Monitor** accepts universal 110-220 Vac power input and provides a 24 Vdc / 50 mA excitation voltage for loop power to external sensors. All monitor functions are configured via the front panel, including °C/°F switching.

The **NCIT Plus Monitor** provides adjustable emissivity and ambient compensation when used with the **NCIT Plus Standard** infrared sensing heads.

Standard Sensing Heads

These high performance, 8-14 micron sensors combine current loop driven signals with high resolution optics.

The **NCIT Plus Standard w/ Laser** sensing head comes equipped with laser sighting for alignment in hard to reach locations, or to small or distant targets. The 50:1 distance to spot (D:S) ratio provides the capability of measuring a spot size of 1.2" at a distance of 5 ft.

The **NCIT Plus Standard** sensing head's D:S ratio of 35:1 allows a spot size of 1.7" at a distance of 5 ft.

Proven Technology

Non-contact infrared temperature sensors have proven advantageous and reliable in many industries for over 25 years. Tempco brings this technology to you at a price competitive with thermocouples.