

# Temperature measurement for plastic film

**The CT P3 IR thermometer by Optris enables non-contact temperature measurement of plastic films from -50 °C to +400 °C. It offers a measuring wavelength of 3,43 µm. CAN is an optional interface.**

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IR thermometer CT P3 for thin plastic films (Photo: Optris)

Temperature is a key physical variable for ensuring quality in the production of [plastic film](#). The application of non-contact temperature measurement technology poses the challenge that films with a thickness of less than 1 mm are transparent for standard IR thermometers and can consequently not be measured. "We developed the optris CT P3 infrared thermometer, which measures in a narrow spectral range of 3,43 µm, in order to enable a precise temperature measurement of thinner films made of, for example, PE or PP," explained Dr. Thomas Heinke, Head of Development at Optris (Germany). The optionally available digital outputs of the product are CAN, USB, EIA-485, and EIA-232 interfaces, as well as relay outputs, Profibus DP, or Ethernet.

The thermometer is a pyrometer that is suitable for retrofitted parts and OEMs. Without cooling, it can be used in environments of up to +75 °C and it has protection class IP65. Its temperature range (scalable via programming keys or software) is from -50 °C to +400 °C. The electronics (420 g) are separate from the sensor head (200 g) and have accessible programming buttons along with an illuminated LCD display. Selection options for the analog outputs are between 0 mA and 20 mA, 4 mA and 20 mA, 0 V and 5 V, 0 V and 10 V, and thermic element versions K or J.

[CW](#)