38.1° C

29.6C   38.1C

Thermal Imaging Technology for
Temperature Screening

The Calibir™ GXF thermal cameras offers outstanding infrared imaging performance in a robust, tiny package. With great sensitivity, outstanding dynamic range for wide temperature coverage, and factory-calibrated radiometric performance, Calibir delivers accurate, repeatable temperature data for critical applications like elevated skin temperature screening.

» 640 x 480 or 320 x 240 resolution, up to 60 fps
» <50 mK NETD, radiometric factory calibration
» Multiple ROIs
» Multicamera synchronization via Gigabit Ethernet
» Sapera and CamExpert software for power, flexibility and control

CALIBIR Thermal Camera

▷ **www.teledyneimaging.com**

**MORE DETAILS** ▶

Features
for Temperature Screening

THRESHOLDING WITH LUT

Calibir GXF and its control software allow you to set your own LUTs (look up tables); with this control, you can mark certain temperatures with color while leaving the rest monochrome. For example, show everything between 38 and 41°C as red.
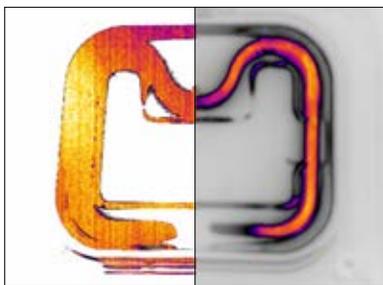
FRAME AVERAGING FOR EXTRA PRECISION

Calibir GXF supports a smart frame averaging feature that can be tuned in order to minimize reading noise according to your tolerance to movement allowing any detection system to reach extremely low NETD values.
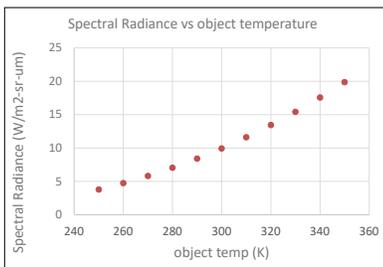
RADIOMETRIC/THERMOGRAPHIC CALIBRATION

Calibir GXF has nonuniformity correction and is factory calibrated with a proprietary flux/temp base algorithm to account for black-body/Planck's Law (IR flux from an object does not change linearly with object temperature). The result is camera output that is linear with IR flux, and each output color or grey level corresponds to an unique object temperature, simplifying your system.

Spectral Radiance vs object temperature

SUPERIOR DYNAMIC RANGE

Calibir GXF has an exceptional range of over 600°C with consistent NETD <0.05°C, enabled by an advanced 21-bit ADC design that still allows easy signal calibration and unprecedented radiometric detail. For the much smaller range of elevated skin temperature screening (~30°C to 45°C), Calibir GXF can output an 8 bit (sub)range of values for convenient integration that still has 21-bit precision and accuracy.

(Left) Third Party sensor with low DR
(Right) Calibir sensor with high DR to retain
          fine detail

REGIONS OF INTERESTS (ROIs) AND METADATA

Up to two Regions Of Interest (ROIs) can be defined inside the camera: size and location, the Min/Max/Average temperatures in each ROI can be displayed as well as the Min/Max/Average indication on the entire image. All this information is available in an easy to use metadata protocol to launch an alert or can be used with other types of image sensor (like visible CMOS sensor for identification for example). Metadata with ROIs temp information can be added to the image buffer.

TELEDYNE IMAGING
Everywhere**you**look™

Thermal Imaging for Temperature Screening

Sapera and CamExpert Software
Power and Control

» Choose 8/16 bit output, monochrome or YUYV color

» Set up to 2 user-defined ROIs (>3x3 pixels) with Min/Max/Average temp—add metadata to image buffer

» Upload user defined Color maps (e.g. "blood" LUT)

» Synchronize and trigger multiple cameras over GigE—combine visible & IR on the same network

---
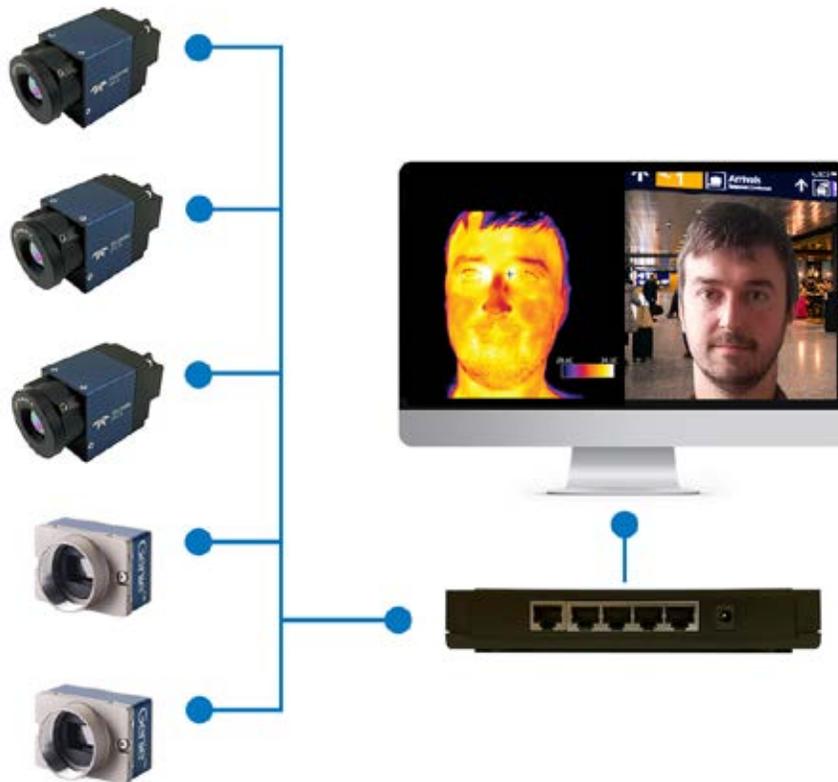
Americas
Boston, USA
+1 978-670-2000
sales.americas@teledynedalsa.com

Europe
Krailling, Germany
+49 89-89-54-57-3-80
sales.europe@teledynedalsa.com

Asia Pacific
Tokyo, Japan
+81 3-5960-6353
sales.asia@teledynedalsa.com

Shanghai, China
+86 21-3368-0027
sales.asia@teledynedalsa.com

www.teledynedalsa.com

TELEDYNE IMAGING
Everywhere**you**look™