

CALEX
ELECTRONICS LIMITED

OneTemp^{pty Ltd}
measure | control | record
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product summary

innovative infrared **temperature sensors**
and **instrumentation**



PyroSigma

Miniature pyrometer with built-in display

0°C to 1000°C

Selectable voltage output

Fully configurable via built-in display and controls

Choose this sensor if:

Available space is limited

You need a small, low-cost sensor

You want to see the measured temperature in-situ



PyroCouple, PyroEpsilon

Small, one-piece pyrometers

-20°C to 500°C

Simple, low-cost

Choice of digital or analogue outputs, including thermocouple

Choose these sensors if:

You don't need any special features

Your target is a non-reflective non-metal, or is painted



PyroNFC

Smartphone-configurable pyrometer

0°C to 1000°C

Voltage, thermocouple and alarm outputs for process instrumentation
Read the temperature and configure the sensor via Android app

Choose this sensor if:

You need a very small, low-cost sensor

You need a voltage output

You want to perform spot checks on the sensors



PyroMini

Touch screen, data logging and more

-20°C to 2000°C

Miniature sensing head and optional touch screen

Optional high-ambient sensing heads

Choose this sensor if:

You need alarm relay outputs

You need to view the temperature or log data

The air temperature is hot (up to 180°C)



PyroUSB

PC configurable, with 4-20 mA output

-40°C to 2000°C

Wide temperature ranges

Analogue and USB outputs

Choose this sensor if:

You need to measure below -20°C

You need to measure bare metals below 100°C

You need to measure the temperature of glass, or measure through a glass window



PyroMiniUSB

For PC based data acquisition

-20°C to 1000°C

Use the included software, or use your own

Ideal for benchtop, laboratory and education

Choose this sensor if:

You need a small, low-cost

benchtop sensor

You need to connect the sensor directly to your own software



FibreMini

For metals and harsh environments

250°C to 2000°C

Fibre optic sensing head for harsh ambient conditions

Optional touch screen with data logging and alarms

Choose this sensor if:

The air temperature is very hot (up to 200°C)

There is a lot of electromagnetic interference

You need continuous laser aiming while taking measurements



PyroMini OEM

Low-cost pyrometer for machine manufacturers

Miniature sensing head with right-angled cable entry and separate electronics module

Sensing head withstands 120°C ambient temperature

Choice of current, voltage or thermocouple outputs

Choose this sensor if:

You need a small, low-cost sensor

You are measuring a non-reflective non-metal surface



ExTemp

Safe in hazardous areas

-20°C to 1000°C

Certified Intrinsically Safe for explosive atmospheres

4-20 mA two-wire output, USB configuration

Optional USB configuration tool and RS485 network adapter

Choose this sensor if:

You need an ATEX, IECEx or TIIS certified sensor



PyroMiniBus

Pyrometer with RS485 Modbus for multi-channel systems

Direct RS485 Modbus comms

Optional 6-channel display

Optional analogue and relay outputs

Install as a standalone system or connect to a Modbus network

Ideal for continuous process temperature monitoring

Choose this system if:

You need to monitor multiple points

You need a local display

You need a simple, all-in-one solution



PyroCAN

Pyrometer with CAN Bus communications

-20°C to 1000°C

Raw CAN protocol

Ideal for vehicle-based applications in industry, agriculture and automotive testing

Choose this sensor if:

You need a sensor with CAN Bus communications



PyroCube S, F

For small targets and fast measurements

0°C to 500°C

Small measured spot size (from 1.6 mm)

Fast response time (1 ms / 10 ms)

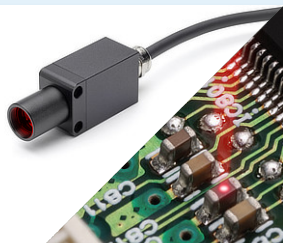
Built-in LED aiming light

Choose this sensor if:

You need a faster response time than 240 ms

You need to measure an area smaller than 10 mm

You need continuous aiming while taking measurements



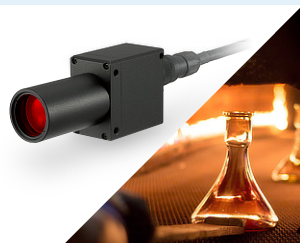
PyroCube XS

For extremely small targets

0°C to 500°C
Extremely small measured spot size (0.7 mm or 1.0 mm)
Built-in LED aiming light

Choose this sensor if:

You need an extremely small measured spot size (smaller than 1.6 mm)



PyroCube G

For fast, precise measurements of glass surface temperature

Specialised measurement wavelength for glass
Fast response time and small measurement area
Built-in LED aiming light

Choose this sensor if:

You need a faster response time than 200 ms
You need to measure a small area on the surface of glass
You need to know where the sensor is being aimed



PyroCube P

For thin plastic film

Specialised measurement wavelength for plastic film
Fast response time and small measurement area
Built-in LED aiming light

Choose this sensor if:

You need to measure the temperature of plastic film



PyroCube M

For measuring metals with a small spot size and fast response

Specialised measurement wavelength for metals
Fast response time and small measurement area
Built-in LED aiming light

Choose this sensor if:

You need to measure a small area on a bare metal surface
You need a faster response than 200 ms
You need to know where the sensor is being aimed



ST640 Series

Low-cost handheld IR thermometer

-35°C to 550°C
Laser sighting
Optional Type K thermocouple input

Choose this thermometer if:

You need the lowest-cost thermometer



ST680 Series

High-performance handheld IR thermometer

-50°C to 1000°C
50:1 optics for precise long distance measurements
Alarms, USB, thermocouple input options

Choose this thermometer if:

You need to measure very low or high temperatures
You need to measure small objects at long distances
You need Type K input and USB communications



FTK

Portable infrared temperature checker

Choice of fixed temperatures from 35°C to 150°C
Quick, accurate way to check calibration of IR sensors
Compact and portable

Choose this blackbody if:

You need a small, portable calibration device
You need the lowest-cost option



BB976 and BB982

Blackbody calibration sources

Variable temperature:
-10°C to 80°C (BB982)
30°C to 550°C (BB976)
Extremely high emissivity > 0.995
Built-in temperature indicator

Choose this blackbody if:

You need the highest possible temperature accuracy



PM180

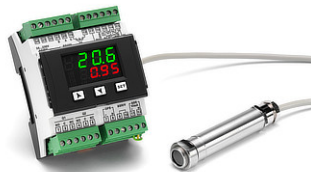
6-channel Modbus indicator for Calex sensors

Temperature display and configuration for up to 6 sensors
Optional relay and analogue output modules

Connect as a slave device to another network
Data logging to MicroSD Card
Compatible with PyroMiniBus, PyroMini BB/BRT, FibreMini BRT

Choose this indicator if:

You need local display for multiple infrared temperature sensors



DRR245

DIN rail mounted indicating PID controller

Dual 4-digit displays, DIN rail or wall mounted
Relay, analogue, SSR outputs, RS485 Modbus
Provides emissivity adjustment for PyroEpsilon sensor

Choose this indicating controller if:

You need a DIN rail or wall mounted device
You need analogue retransmission of the process value



ATR121

Panel-mounted indicating PID controller

3-digit display, panel mounted
Relay, SSR outputs
Time-proportioned open/close logic for PID

Choose this indicating controller if:

You need the lowest-cost indicator or controller



ATR244

Multi-function indicating PID controller

Dual 4-digit displays, panel mounted
Relay, analogue, SSR outputs
RS485 Modbus and NFC comms

Choose this indicating controller if:

You need 3 relay outputs
You need a quick, easy way to configure the controller
You need analogue retransmission of the process value

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