

CALEX
ELECTRONICS LIMITED

product summary



innovative infrared **temperature sensors**



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



PyroCouple, PyroEpsilon, PyroBus

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



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



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



PyroCube S, XS

For small targets

0°C to 500°C

Extremely small measured spot
Fast 10 ms response time

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 F

For extremely fast measurements

50°C to 500°C

Super-fast 1 ms response time
Built-in aiming light

Choose this sensor if:

You need a faster response time than 10 ms



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-film plastics

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



ExTemp

Safe in hazardous areas

-20°C to 1000°C
Certified Intrinsically Safe for explosive atmospheres
4-20 mA two-wire output, USB configuration

Choose this sensor if:
You need an ATEX, IECEx or TIS certified sensor



PyroMiniBus

Pyrometer with RS485 Modbus for multi-channel systems

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



Panel PCs

Industrial computers with temperature monitoring software

7" or 10" screen sizes
USB and RS485 Modbus interfaces
Use as a standalone system, or transfer data live to other systems via Modbus TCP

Choose this panel PC if:
You need to monitor temperatures at a large number of points
You need to see temperature values and graphs
You need to log data and access it over a network



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

Medium-temperature blackbody calibrator

Variable temperature 30°C to 550°C
Extremely high emissivity > 0.995
Built-in temperature indicator

Choose this blackbody if:
You need the highest possible temperature accuracy
You need to calibrate at temperatures higher than ambient



BB982

Low-temperature blackbody calibrator

Variable temperature -10°C to +80°C
Extremely high emissivity > 0.995
Built-in temperature indicator

Choose this blackbody if:
You need the highest possible temperature accuracy
You need to calibrate at temperatures lower than ambient



STR571

8-channel Modbus indicator

Panel mounted display for 8 Modbus variables
2 alarm relay outputs
Connect as a slave device to another network

Choose this indicator if:
You need a low-cost, panel-mount Modbus indicator



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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