

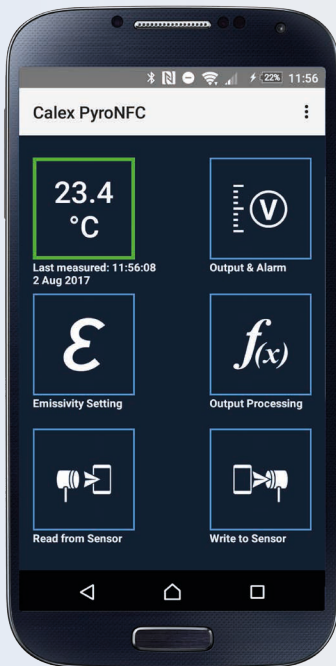
PyroNFC

Smartphone Configurable Infrared Temperature Sensor



- Non-contact industrial temperature sensor
- Fully configurable via smartphone app
- Choice of voltage or thermocouple outputs
- Simultaneous open collector alarm output
- Measures from 0°C to 1000°C, accurately and consistently
- Extremely small, with side-entry cable: ideal for mounting in tight spaces
- Fast response time: 125 ms
- Low cost, high performance
- Operates in ambient temperatures up to 80°C without cooling
- Form factor optimised for brake testing applications, plus many others

APP FEATURES



- Continuously read temperature from PyroNFC sensors
- Instantly configure PyroNFC sensors without powering them
- Simply touch the sensor with the device to communicate
- Compatible with NFC-equipped Android devices
- Get the app free from Google Play Store (search for "PyroNFC")

GENERAL SPECIFICATIONS

Temperature Range

0 to 1000°C

Outputs

2 outputs, configurable via NFC:
0-5, 1-5 or 0-10 V DC output, linear with measured temperature, rescalable, and:
Open collector alarm output with temperature threshold and hysteresis

Field of View

15:1 (see OPTICS)

Accuracy

± 1.5% of reading or ± 1.5°C, whichever is greater

Repeatability

± 0.5% of reading or ± 0.5°C, whichever is greater

Response Time, t_{90}

125 ms

Configuration

Via Android app using NFC-equipped device (e.g. smartphone or tablet)

Emissivity

Adjustable via app

Emissivity Setting Range

0.2 to 1.0

Max Temperature Span (Linear Output)

1000°C

Min Temperature Span (Linear Output)

100°C

Spectral Range

8-14 μm

Max. Supply Voltage

28 V DC

Min. Supply Voltage (at Sensor)

12 V DC (for 10 V output)
6 V DC (for 5 V or thermocouple output)

Max Current Draw

7 mA

ENVIRONMENTAL

Environmental Rating

IP65

Ambient Temperature Range

0°C to 80°C

Relative Humidity

95% max. non-condensing

CONFORMITY

Electromagnetic Compatibility (EMC)

EN61326-1, EN61326-2-3 (Electrical Equipment for Measurement, Control and Laboratory Use - EMC Requirements - Industrial)

RoHS Compliant

Yes

APP

Configurable Parameters

Temperature range (linear output)
Linear voltage output type and scale
Alarm output threshold and hysteresis
Emissivity setting
Reflected temperature

Temperature Units

°C / °F

Signal Processing

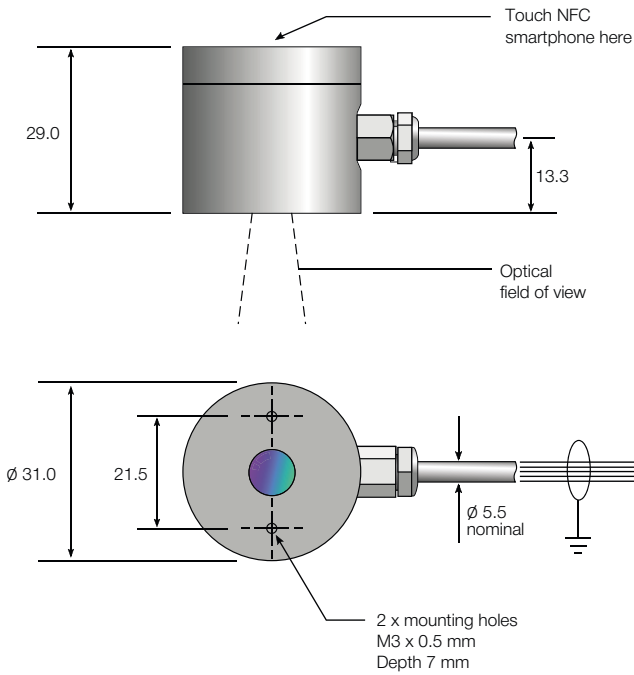
Averaging Period (0.125 to 60 seconds)
Peak / Valley Hold
Hold Period (0.125 to 1200 seconds)

Real Time Temperature Reading

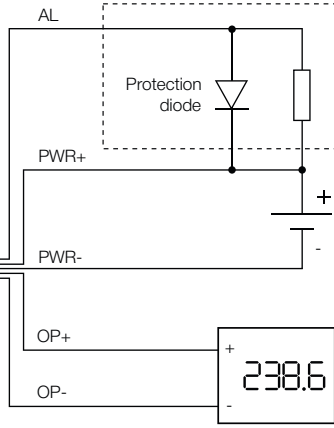
Hold NFC device against sensor for continuous in-app temperature updates

DIMENSIONS AND CONNECTIONS

MODELS WITH TYPE K THERMOCOUPLE OUTPUT



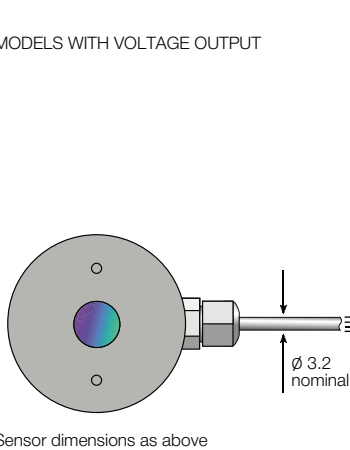
Open collector output for alarm
0 to 24 V DC, 50 mA



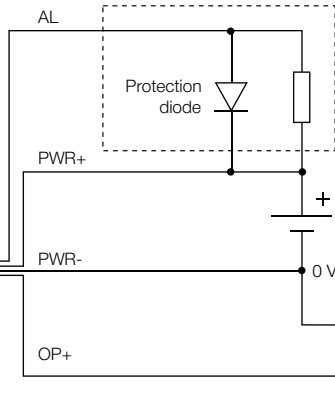
Power supply
6 to 28 V DC

Type K
Thermocouple
output for
display or
controller

MODELS WITH VOLTAGE OUTPUT



Open collector output for alarm
0 to 24 V DC, 50 mA



Power supply
6 to 28 V DC

Output 0 to 5 V DC,
1 to 5 V DC or
0 to 10 V DC for
display or controller



0 V

OP+

PWR-

PWR+

AL

Protection diode

+

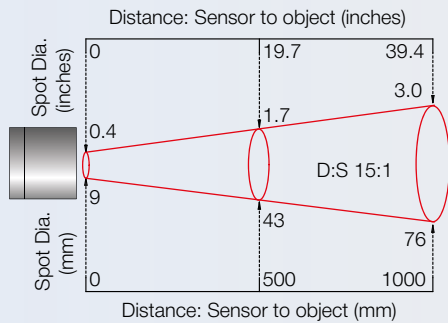
-

+

-

OPTICS

Diameter of target spot measured versus distance from sensing head (90% energy)



MODEL NUMBERS



PN **151** **K**

Series

PN = PyroNFC infrared temperature sensor with
NFC wireless communications and 1 metre cable

Optics

151 = 15:1 divergent optics

Outputs

(blank) = configurable 0-5 / 1-5
/ 0-10 V DC output for
measured temperature and
open collector alarm output
K = Type K Thermocouple
output for measured
temperature, and open collector
alarm output

ACCESSORIES

Fixed mounting bracket **FBN**

Adjustable mounting bracket **ABN**

Air purge collar **APN**

3-point UKAS traceable calibration certificate **CALCERTA**

Extended cable (30 m max) **PNCE (voltage output) / PNCEK (thermocouple output)**