PyroNFC

Smartphone Configurable Infrared Temperature Sensor

• Non-contact industrial temperature sensor
• Fully configurable via smartphone app
• Voltage output (linear with temperature) and open collector alarm output. Both can be used simultaneously
• 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 85°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 V DC 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, t₉₀
125 ms

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

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 output)

Max Current Draw
6 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 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**

- Touch NFC smartphone here
- Field of view (see OPTICS)

**MECHANICAL SPECIFICATIONS**

- Construction: Black anodised aluminium and ABS
- Cable Length: 1 metre standard, (longer lengths available to order)
- Weight with 1 Metre Cable: 65 g

**OPTICS**

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

**MODEL NUMBERS**

- PN 151

**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

**DIMENSIONS AND CONNECTIONS**

2 x mounting holes
M3 x 0.5 mm
Depth 7 mm

**MECHANICAL SPECIFICATIONS**

Power supply 6 to 28 V DC
Open collector output for alarm
Output 0 to 5 V DC or 0 to 10 V DC for display or controller

**OPTICS**

Spot Dia. (mm)
D:S 15:1

**MODEL NUMBERS**

Optics 151 = 15:1 divergent optics

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