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 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 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, 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 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 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

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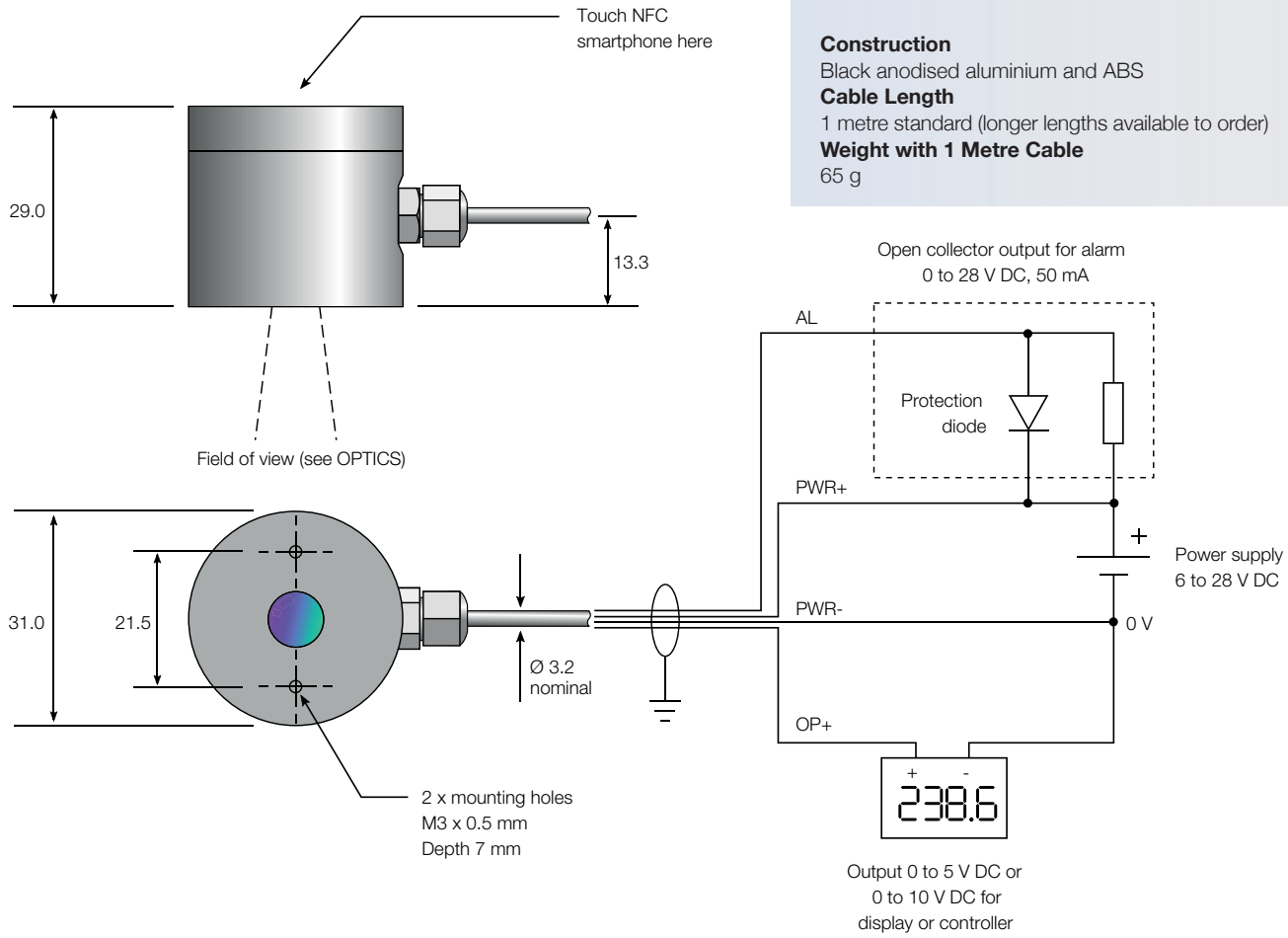
DIMENSIONS AND CONNECTIONS

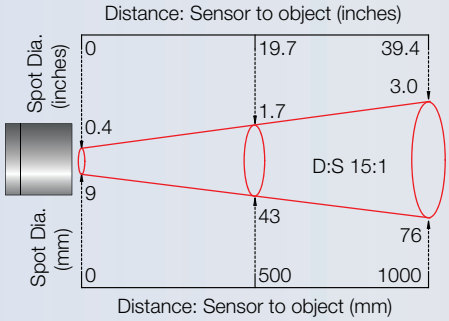


MECHANICAL SPECIFICATIONS

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**

Optics
151 = 15:1 divergent optics

Series
PN = PyroNFC infrared temperature sensor with 0-5 / 0-10 V DC output, open collector alarm output, NFC wireless communications and 1 metre cable

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**

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Specifications subject to change without notice