

# PERTRONIC INDUSTRIES

## DATASHEET

### 2151BPI Conventional Photoelectric Smoke Detector



#### Product Overview

The 2151BPI Smoke Detector is a photoelectric point detector designed for general purpose smoke detection in conventional detection circuits. The optical smoke sensing chamber detects particles from a wide range of combustion sources, with stable performance in air flow up to 15 metres per second.

The sensing chamber is protected by a fine mesh screen which can be easily cleaned or replaced.

The 2151BPI features an on-board signal processor which is designed to reduce nuisance alarms.

Compatible mounting bases including the B401 allow the wiring to be installed and tested without fitting the 2151BPI detectors. A shorting spring in the mounting base provides electrical continuity when the detector is not plugged in.



**2151BPI Conventional Photoelectric Smoke Detector**

#### Features

- Dual Red indicating LEDs for 360° visibility
- Magnetic Alarm Test Switch
- A shorting spring in the mounting base allows the wiring to be installed and tested without plugging in the device
- Range of adaptor bases
- Low standby current
- Tamper resistant base
- Optional remote LED accessory
- Removable cover for easy cleaning
- Compatible with 400 series products
- Independently tested and SAI Global StandardsMark certified to AS 7240.7-2004
- Complies with the requirements of NZS 4512:2021 section 2.16.2
- FPANZ listing number PI/341

## Specifications (with B401 Base)

- Operating Voltage 10 V dc to 30 V dc
- Standby Current 85  $\mu$ A @ 24 V dc
- Alarm Current Panel Dependent (100 mA maximum)
- Dimensions (including Base) 102 x 51 Diameter x Depth mm
- Weight (including Base) 147 g
- Cable Terminations 0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup>
- Operating Temperature Range 0 °C to 49 °C
- Humidity 10 % to 93% RH, non-condensing

## Adapter Base Selection Guide

Base Model Number	Loop Type	Current Limit Resistor	Nominal Voltage	Current Draw in Alarm (mA)
B401	2-wire	No	12/24 V dc	10-100*
B401R	2-wire	Yes (470 $\Omega$ )	24 V dc	10-100*

\* The 2151BPI detector requires an external limit on the alarm current. Pertronic conventional fire panels limit the alarm current to less than 25 mA. Alternatively, the 2151BPI may be used with a B401R base, which provides a 470  $\Omega$  current limiting resistor.



**B401**

## Ordering Information

Product Code	Description
2151BPI	Conventional Photoelectric Smoke Detector
B401	Conventional Detector Base
B401R	Conventional Detector Base with 470 $\Omega$ Resistor

This information must not be treated as partial or complete instructions for the design, construction, installation, commissioning, or maintenance of fire detection, fire alarm, or building evacuation systems. Fire and evacuation systems must be designed and installed by properly qualified persons, in accordance with all regulatory requirements.

Unless explicitly stated otherwise, this document provides typical specifications and nominal dimensions. Actual product performance and dimensions may vary.

All information in this document is subject to change. Please consult Pertronic Industries or visit our web site for up to date information.

PERTRONIC® is a registered trademark of Pertronic Industries Limited.

