

# PERTRONIC INDUSTRIES LTD

## DATASHEET

### Analogue Addressable Smoke Detector

2251BPI-IV, 2251BPI-W, 2251BPI-BK



## Overview

The Analogue Addressable Smoke Detector (2251BPI) is a plug-in photoelectric smoke detector with analogue addressable communication.

The smoke level in the sensor chamber is continuously monitored and reported to the fire panel. For each individual 2251BPI detector, the alarm, fault, and maintenance thresholds are programmable in the fire panel configuration software.

A suitably configured fire panel will identify the location of any detector which has triggered an alarm, fault, or maintenance signal. The fire panel can also identify any active detector by lighting up two red LEDs on the detector housing.

*Analogue Addressable  
Smoke Detector  
2251BPI-IV in  
B501AUS-IV Base*



The fire panel may be configured to briefly light up the LEDs (“blink”) when the detector is polled.

The detector’s address on the analogue addressable loop is easily set using rotary address switches.

## Features

- » Analogue addressable communications
- » Automatic drift compensation
- » Stable communication with excellent noise immunity
- » Smoke sensitivity configurable in the fire panel
- » Low standby current
- » Rotary address switches
- » Address range 1 to 159
- » Up to
  - » 159 detectors per loop (Pertronic F220, F120A)
  - » 99 detectors per loop (Pertronic F100A)
- » Dual red LEDs for 360° visibility
- » Optional remote LED indicator available (Note 1)
- » Compatible with B501AUS, B501AP, and other System Sensor B500 series bases
- » Independently tested and ActivFire listed to AS 7240.7:2018, certificate afp-3384
- » Meets the requirements of NZS 4512:2010, FPANZ listing PI/365

## Specification

<b>Operating Voltage</b>	15 to 32 Vdc
<b>Quiescent Current</b>	150 to 300 $\mu$ A (see note 2)
<b>LED Current</b>	6.5 mA @ 24 Vdc
<b>Dimensions (diameter x height)</b>	102 x 51 mm (in B501AUS base) 102 x 58 mm (in B524IEFT-1 base)
<b>Weight</b>	89 g (excl. base)
<b>Operating Temperature</b>	0 °C to +49 °C
<b>Humidity</b>	10 % to 93 % RH, non-condensing
<b>Air Velocity</b>	0 to 20.3 m/s (for installation in ducts)

## Ordering Information

Product Code	Description
2251BPI-IV	Analogue Addressable Photoelectric Smoke Detector, Ivory
2251BPI-W	Analogue Addressable Photoelectric Smoke Detector, White
2251BPI-BK	Analogue Addressable Photoelectric Smoke Detector, Black (please contact us to confirm availability)
B501AUS-IV	Analogue Addressable Detector Base, Ivory
B501AUS-W	Analogue Addressable Detector Base, White
B501AUS-BK	Analogue Addressable Detector Base, Black (please contact us to confirm availability)
B524IEFT-1	Analogue Addressable Detector Base with Isolator, Ivory

### Notes

1. Please refer to the *Remote Indicators (AU)* or *Pertronic Remote LED Indicator (NZ)* datasheets for details of remote LED indicators.

2. Typical maximum quiescent (standby) current with LED blink enabled, and one poll every five seconds, is 300  $\mu$ A

The information in this document 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.

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