

Mains powered Thermoptek smoke alarm with 10 year sealed for life battery back-up

- The smoke alarm shall carry the BSI Kitemark to indicate type testing to BS EN14604: 2005. It will meet the requirements of Grade D as defined in BS 5839 Pt.6: 2013. The alarm shall carry the CE mark to indicate conformance to all of the applicable EC directives including Low Voltage and Electromagnetic Compatibility Directives.
- The alarm shall utilise multiple sensing elements. Incorporating thermally enhanced optical sensing technology (Thermoptek) which constantly monitors for temperature change. If a rate of temperature rise is predicted to rise above a predetermined threshold the sensitivity of the alarm is increased, providing a quicker response time to both slow smouldering and fast flaming fires in a single alarm.
- The alarm shall be energy efficient with an operational power consumption of 49mW and consume no more than 4.29kW over its 10 year lifetime.
- The alarm shall carry a proven carbon footprint of 13.9kgCO₂e over its 10 year lifetime.
- The alarm shall incorporate a diagnostic function which monitors alarm activations and facilitates fault finding.
- The alarm shall operate on a 230V mains power supply and have a single built in tamper proof sealed for life 10 year lithium battery back-up to power the alarm in the event of a mains failure.
- The single lithium battery shall power the alarm for 10 years from installation in the event of a mains failure.
- The alarm shall have the ability to hardwire interconnect with up to 30 other smoke and heat alarms of a similar type on a single network. When one alarm sounds all other alarms on the network will also sound.
- The alarm shall be capable of working on a mixed system to include hard-wired and wireless alarm interconnect of both mains and battery type products.
- The alarm shall be supplied with a quick-fitting surface mounting base with a depth of no more than 5mm with integral terminal block and cable cover. Cable knock outs allow for compatibility with YT2 cable trunking. Universal screw holes provide backwards compatibility for ease of install and less drilling on installation. Ideal for retro-fitting projects where older alarms are being removed from the ceiling and where there could be asbestos concerns.
- The alarm base shall incorporate a large cable entry area for ease of installation.
- All mains wiring shall be covered by a cable cover, protecting the cables when the alarm is removed from the ceiling, negating the need for dry lining box or ceiling pattress.
- The alarm shall automatically connect to the mains as it locks onto the mounting base and disconnect from the mains as soon as it is removed from the mounting base.
- The mounting base shall have a factory fitted foam gasket to prevent air draughts and dust ingress into the rear of the unit.
- The mounting base shall incorporate a tamper resistant hinge lock action that secures the alarm firmly into place and thereafter can only be removed with a tool.
- The alarm shall have a built in sounder giving a minimum sound output of 85dB (A) at 3m.
- The alarm shall have a secondary sounder fitted to ensure fail-safe operation in all circumstances.
- The alarm shall incorporate a large central test / silence button to test circuitry, sensor and sounder and activate all interconnected alarms in the system.
- The alarm shall feature 'Smart Silence' technology which allows the alarm to be silenced for up to 10 minutes in the event of a known false alarm. A red LED on the alarm will flash every 10 seconds to indicate that the alarm is in silence mode and will automatically reset after approximately 10 minutes. During these 10 minutes if additional smoke is detected the alarm silence will be overridden and the alarm will sound.
- The alarm shall have a low battery warning signal, which will 'chirp' every 45 seconds for at least 30 days to indicate when a replacement of the alarm is required. All other alarms on the network shall also emit an audible low battery chirp once every 4 hours. This will continue until the alarm which has the low battery condition is replaced.
- The alarm shall incorporate 'Sleep Easy' functionality whereby a low battery chirp can be silenced for a period of 8 hours by pressing the test button on the smoke / heat alarm. This function can be used up to 10 times.
- The alarm shall feature an intelligent Smart Silence / locate feature whereby pressing the test / silence button on any alarm in the network will silence all but the initiating alarm.
- The alarm shall have the following LED indications:
 - A green LED will be lit constantly when connected to the mains power.
 - A red LED flash occurs every 45 seconds confirming full auto test of the unit.
 - An amber LED flash occurs every 45 seconds with a chirp indicating a fault with the alarm.
 - An amber LED flash occurs every 40 seconds with an intermittent chirp indicating that the alarm needs cleaning.
- The manufacturer must be capable of supplying accessories that comply to BS 5839 Pt.6: 2013 Section 14 such as a low frequency sounder and combined strobe and vibrating pad for those that are deaf or hard of hearing.
- The alarm shall be supplied with a dust cover fitted to protect it from contaminants during installation.
- The alarm shall be manufactured from ABS, UL94 V0 fire retardant plastic.
- The alarm shall be supplied with installation / user instructions.
- The alarm shall have the following dimensions: 141.5mm diameter x 53mm depth including the baseplate.
- The alarm shall have the following weight: 258g.
- The alarm shall have a 5 year warranty.