thefirebeam™ reflective optical beam smoke detector with a motorised head, that can align itself when commissioning, and continually correct itself against building movement.....

and that can be controlled and adjusted from ground level

We looked at the optical beam detection market, saw the problems, and from a clean sheet of paper, built what we believe to be the ultimate reflective beam on sale today.

The nagging problems of alignment, power, and accessibility have all been addressed providing a beam detector that is reliable and easy to maintain, and more importantly that will ......

reduce the risk of expensive false alarms

thefirebeam™ comes as standard with both the head unit and a low level controller

thefirebeam protection system includes a motorised head unit containing an infra-red transmitter and receiver, a ground level controller and prism reflector. Making use of the prism reflector the returned infrared beam is analysed for smoke contamination and registers a fire condition at a pre determined level. At ground level the controller unit is used to make operational adjustments. The standard Protection system covers a range of 5 to 40 meters, 2 further range kits are available, a 40 to 80 meter kit that utilises 4 reflectors and finally a 80 to 100 meter kit that makes use of 9 reflectors.

so what makes thefirebeam head unit so special?....

a motorised head
thefirebeam incorporates microprocessor controlled motors that intelligently align the head at all times. When first commissioning the head accurately aligns itself, and in operation the head will re align should there be building movement, a problem with new build settlement and environmental change. thefirebeam's beams unique ability to self align means that high level re adjustment because of this is no longer required, saving time, disruption and importantly cost. The motorised head means greater reliability that will reduce troublesome false alarms.

very low power
thefirebeam protection system uses only 3mA at all times, so in most cases can happily be zone powered. Compatible with most major fire panels the simplicity of our system usually means no extra power supply, meaning easier installation and a lower installation cost.

designed to meet latest approvals
thefirebeam has been designed from scratch to fully comply with EN 54 part 12. and exceeds European standards, in particular BS5839 part 1.

technician friendly design
thefirebeam has been built with the technician very much in mind. It has a simple wall mounting method for both the beam head and low level controller. Large, accessible, easy to use colour coded terminals make connection easy in an often awkward environment, all cables are easily terminated within the unit (now a BS requirement). Casing screws are captive and won't annoyingly fall to the ground from a great height. Special mounting brackets are also available that have been designed for use with the popular Unistrut system.

micro beam technology
thefirebeam utilises fresnel optics coupled with an optimised powerful infra-red diode. Because of this and advanced design technology thefirebeam can be routed through more restricted locations with out misalignment or spurious reflections.

and what makes thefirebeam low level controller so useful?....

thefirebeam ground level controller has been especially designed to take away the need for high level maintenance. With a simple menu system viewed through a LCD screen all adjustments can be made at ground level including a test procedure.

you can now complete all of the following at ground level.....

commission
thefirebeam is commissioned by following a very simple procedure. You will easily align the beam having full confidence that the beam has correctly aligned itself on the centre of the reflector.

adjust thresholds
thefirebeam's sensitivity is fully adjustable between 25 and 50%.

check contamination compensation
thefirebeam will automatically compensate for a build up of dust over the lenses. From the LCD display you can check the current status and only clean the lenses when required.

time to fire and fault
thefirebeam time to fire can be adjusted in 1 second increments between 1 and 30 seconds, and the time to fault can be adjusted anywhere between 1 to 60 seconds.

change latching mode
thefirebeam relays can be set to latch on alarm or auto reset depending on your individual requirement.

turn on and off
thefirebeam can be individually switched off if required. Should you forget to turn it back on it will resume normal operation after 8 hours.

self test
thefirebeam can be tested from ground level as part of routine maintenance.

event count
thefirebeam will record how many times it has fallen in to fault or fire since last reset.

full diagnostics
thefirebeam has a full in depth diagnostics facility, that can be accessed if required in conjunction with our technical help department. From here you can even find out the temperature of the beam head!
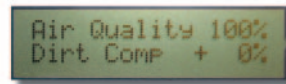
other features of thefirebeam.....

IP65
we have built into thefirebeam protection system an IP rating of 65.
The system is fully sealed against contamination ingress, which means that it is possible to place thefirebeam in unfriendly environments and could even be pressure washed.

24 hour help line
we are committed to make using thefirebeam as easy as possible but, however if you should have a problem our help line is available 24 hours a day.

who makes **the**fire**beam**?.....

thefire**beam has been developed and manufactured in Malaysia by Lemtronics. A long established world-class manufacturer of custom electronics with a strong reputation for quality, Lemtronics brings you this unique premium quality product at a highly competitive price**

who is Lemtronics?

Lemtronics is a growing, integrated EMS provider and a wholly-owned subsidiary of Lemarne Corporation Limited, a publicly-traded company (symbol LMC) on the Australian Stock Exchange (ASX). Since its founding in 1988, Lemtronics has built an enviable reputation in the electronics industry for its commitment to quality and service on behalf of its many multi-national customers around the world.

By building quality from within, Lemtronics has become a prime supplier to some of the best known global brand names and manufacturers. Capitalizing on its years of production, assembly and distribution experience, Lemtronics is proud of its contribution to the success of its customers and their brands.

Lemtronics in Europe

Established early 2004, this team is focused on strengthening existing business relationships, and expansion of the client base in Europe. The Lemtronics Europe head office is located in Nürnberg, Germany, with permanent team members on the ground in the UK.

Quality

Lemtronics, is committed to quality through a stringent and demanding corporate quality control program. The manufacturing and assembly facility is organized to deliver **the**firebeam to the highest quality through internal quality assurance standards as well as internationally recognized certifications.

thefire**beam** technical specifications

construction	housing : white high heat abs UL94 HB	**sensitivity**	fully adjustable between 25% & 50%
rating	IP 65	**operating voltage**	10.2 - 30 volts +(protocol)
operating temperature	-15C to 55C	**quiescent current**	3 mA
weight	approx: head 1kg-controller 0.5kg	**alarm current**	3 mA
dimensions	W155mm x H180mm x D125mm	**alarm**	latching - non latching option
time to fault	adjustable between 1s and 60s	**fault relay**	CO 1A at 30 volts
time to fire	adjustable between 1s and 30s	**fire relay**	CO 1A at 30 volts

compare **the**fire**beam** to its competition

	thefire**beam**	**Fire Fighting Enterprises**	**Hochiki**	**System Sensor**
motorised self aligning head	✔	✗	✗	✗
low power - zone powered	✔	✗	✔	✗
micro beam technology	✔	✗	✗	✗
ground level controller	✔	optional test unit	✗	optional test unit
IP 65 rating	✔	✗	✗	✗
contamination compensation	✔	✔	✔	✔

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