

SICK Safety Camera is a Versatile Light Curtain Alternative

SICK UK has launched the V300 infra-red vision camera to offer a convenient and reliable Type 3 alternative to a safety guard light curtain in production and warehouse environments.

The ISO 13849-1 PLd compliant and competitively-priced SICK V300 has a resolution of 20mm and is suitable for protection of areas up to 1.5m by 1.5m, or more if synchronised as a multi-device unit.

"The V300 is an incredibly useful device," comments Dr Martin Kidman, SICK UK machinery safety specialist. "It also solves the problem where a Type 2 light curtain now no longer meets the requirements for PLd applications and the change to a Type 4 light curtain is too expensive, or is clumsy and intrusive.

"The V300's compact right-angled mount allows it to be fixed unobtrusively in the top corner of a portal or other entrance access to a guarded area, or even integrated into the steelwork frame. It doesn't restrict access and is not vulnerable to accidental damage as a light curtain can be. In fact, the reflective tape which the light bounces off is incredibly durable!"

The SICK V300 safety camera is an infra-red based scanner with a camera chip system that detects light reflected from a strip of reflective tape mounted opposite which defines the protected field. The 110° field allows full coverage of an opening up to 1.5m by 1.5m with a field depth of about 10° either side for additional coverage, enabling optimal positioning while still offering protection without blind spots.

The flexible reflective strip is self-adhesive, so can be easily contoured to allow for discontinuities such as steps, cable runs or housings, or even curves and round shapes such as rotary table housings. The protected field no longer has to be rectilinear, as with light curtains, and could facilitate new designs of safety guarding.

Tests have shown that the reflective strip is extremely durable, with endurance trials including a loaded crate pushed over it 10,000 cycles. The strong adhesive will not detach under severe industrial conditions. The V300 camera is smart enough to operate safely by ignoring distinct scratches in the strip while detecting human body parts inserted into the field.

The 20mm resolution is sufficient to detect human intrusion to hand size and the response time of 20 milliseconds provides excellent margins for stopping machinery safely. The V300 is easy to set up once the device is positioned opposite the reflective tape, one press of the teach-in button will make the field operable.

For more information on the SICK V300 safety camera, please contact Andrea Hornby on 01727 831121 or email andrea.hornby@sick.co.uk.

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