

Product Datasheet



KEY FEATURES

- Significant reduction in false 3D triggers by using microwave radar technology
- Suitable for centre-opening and side-opening doors
- Offers full passenger protection when combined with Panachrome+ 2D light curtains
- 10mm & 43mm available for Panachrome+
- Display and keypad on Panachrome+ controller for easy programming
- Ignores cross-traffic of people moving towards the elevator
- Is not affected by ambient light



Scan the QR code to take a closer look at the 3D model

Smart 3D from MEMCO by AVIRE is a door protection system which provides enhanced 3D detection in the landing zone. The system uses Panachrome+ infrared 2D detection and microwave radar technology for its 3D detection.

Traditional 3D technology is based on reflected infrared light which has some inherent limitations. Infrared light is unable to understand the difference between passing passenger traffic and passengers wanting to travel in the lift. The technology is also unable to ignore stationary objects left in the detection zone and false triggers can often occur where there is a highly polished floor. All of these issues affect the people flow in the building and can result in increased call outs for the lift maintenance companies.

Smart 3D uses microwave radar technology which results in a significant reduction in these three main causes of false triggers.

- It is not affected by reflected ambient light.
- The sensor is able to ignore stationary objects within the 3D zone while still detecting if/when someone approaches the doors.
- The sensor can discriminate between people passing through the 3D zone from the sides and people who are approaching the doors.

Smart 3D allows lift companies to fit a reliable solution for 3D detection in the landing zone. This enhanced 3D technology ensures optimal people flow in the building and reduces the number of costly call outs.

3D Detection

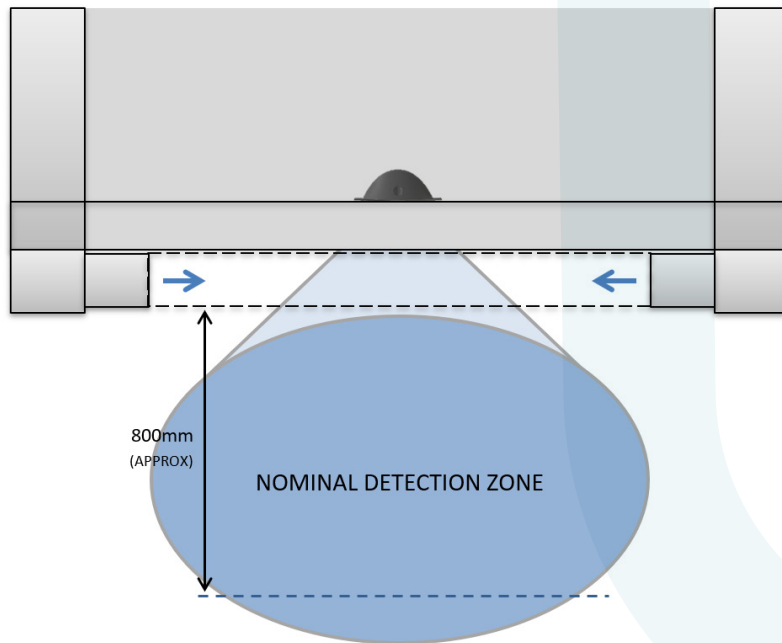


Fig.1 The operating principle of Smart 3D showing the sensitive zone projected into the landing

Mounting of Smart 3D

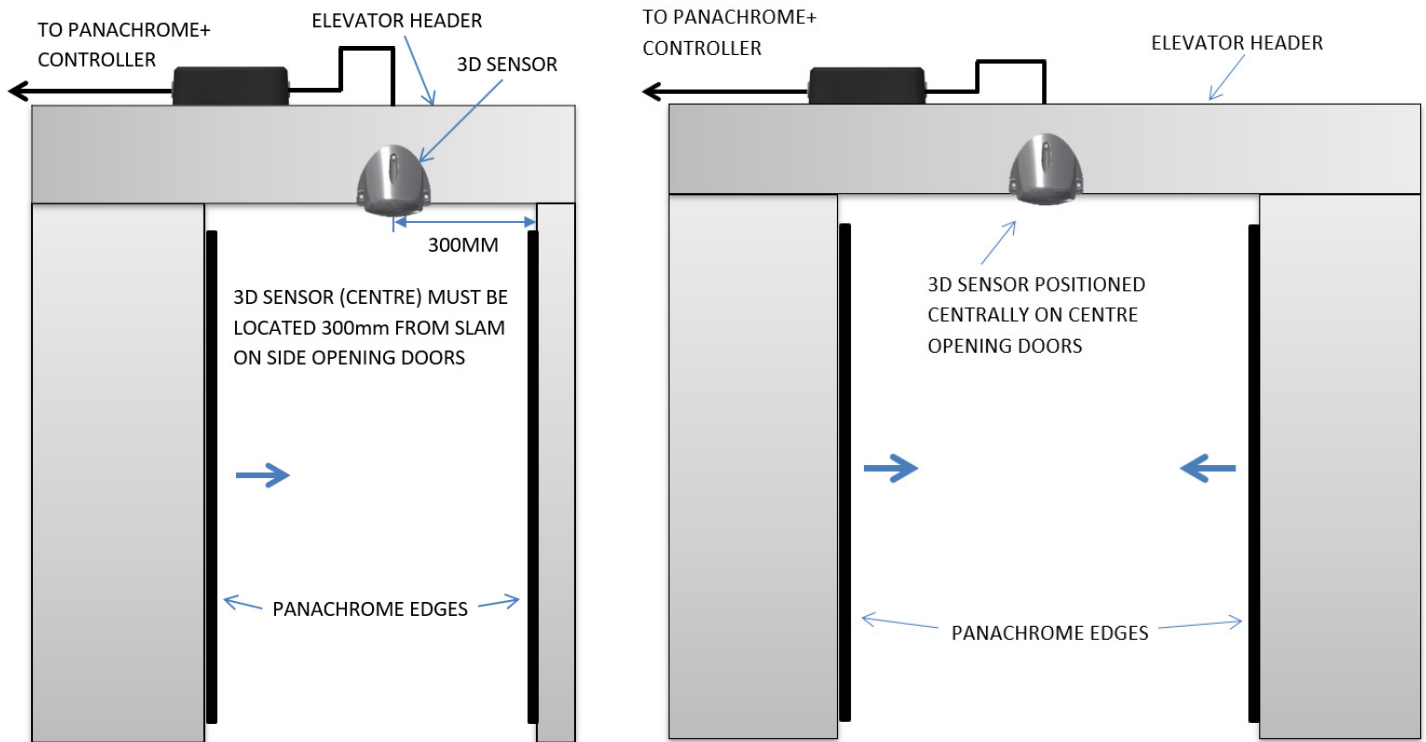


Fig.2 Mounting for the 3D sensor in centre and side-opening installations

Fixing of Smart 3D

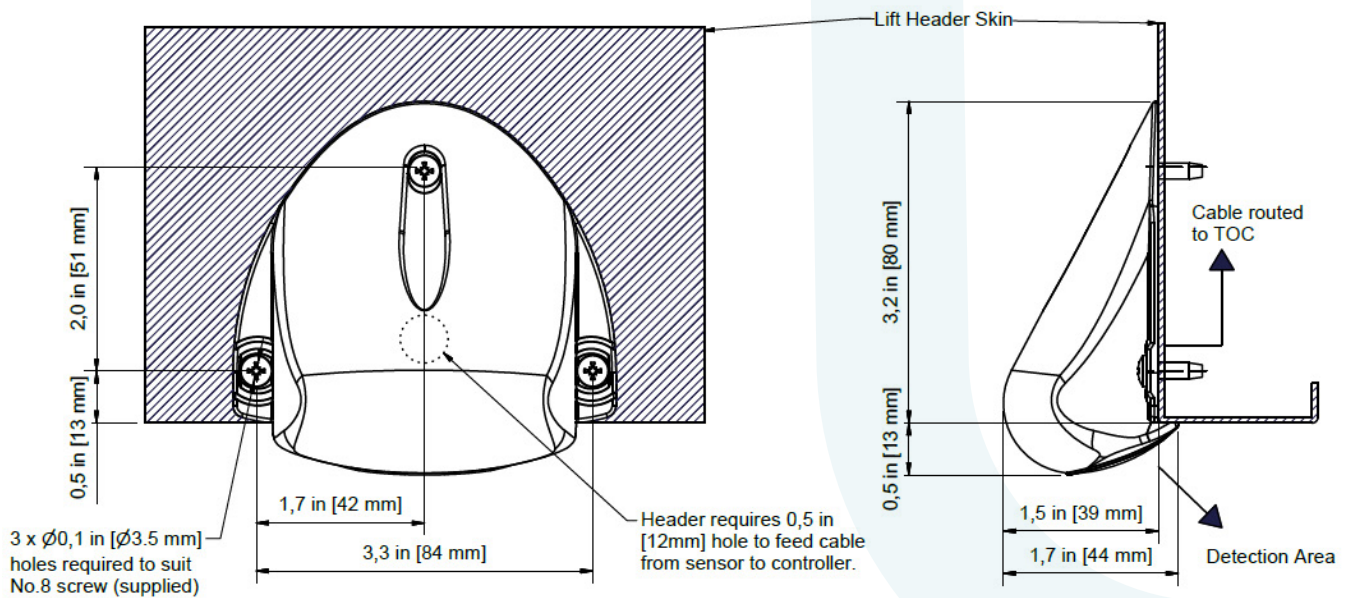


Fig.3 Fixing of the 3D sensor

Panachrome+ Detector Profiles

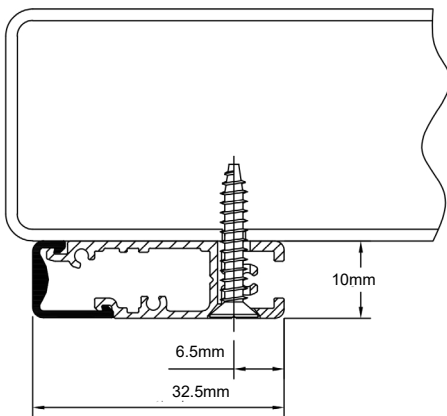


Fig. 4 10mm Profile fixed with countersunk self-tapping screw

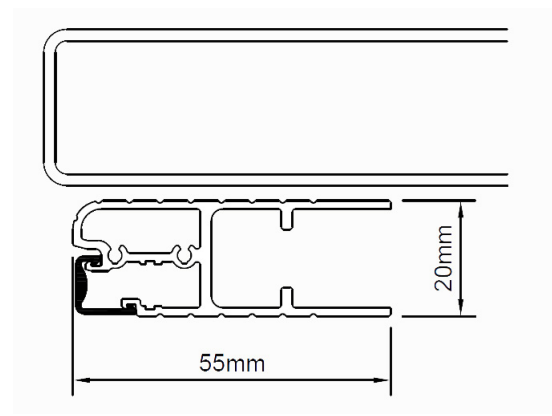


Fig. 6 2/3in1 20mm Profile

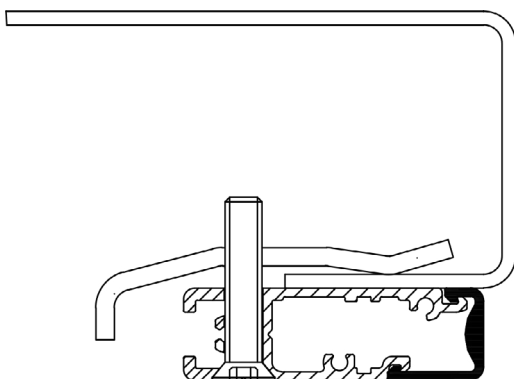


Fig. 5 10mm Profile mounted using a fixing clamp plate

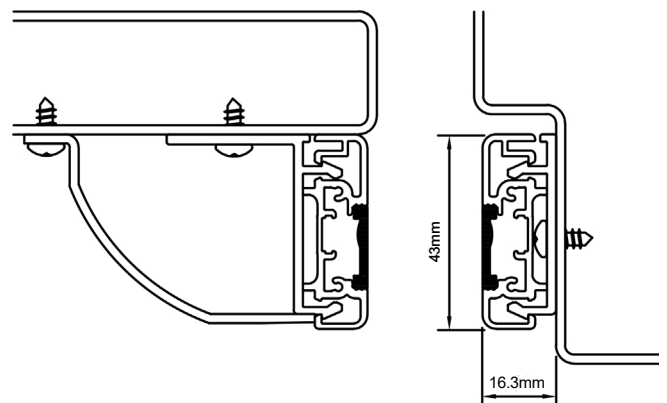


Fig. 7 43mm Profile mounted for side-opening using an 'L' bracket with a finger guard and slampost bracket

With manufacturing locations in 4 countries and sales offices in 14 locations, we manufacture the world's most trusted solutions that have already been installed in over 200,000 lifts across Europe to ensure passenger safety and compliance. We also offer local Support Services to ensure our customers receive the help they require.

Technical Specification

Smart 3D Sensor		
Mounting height	1.8-2.8m	.
Transmitter frequency	24.150 GHz	.
Transmitter power density	<5mW/cm ²	.
Minimum detection range (from door face)	200mm to 500mm	.
Detection width	1.4m side opening and 1.8m centre opening	.
Detection mode	Motion	.
Min detection speed	20 cm/s	.
Operating distance	With door separations > 30cm (adjustable on Panachrome+)	.
Panachrome+ Detectors	G2540 (2D)	G2510 (2D)
Detector Dimensions	43mm x 16mm x 2005mm	10mm x 33mm x 2000mm
Number of Diodes	48	
Number of Beams	234	
Ext. Cables 015 455 Length	4m	
Detector monitoring height (min)	20mm	
Detector monitoring height (max)	1800mm	
Range - 2D	6m	
Maximum voltage in Detector	12VDC	
Maximum power consumption	6W	
Operating temperature range	-10°C to +65°C	
EMC Compliance	Emissions to EN 12015:2014	
Ingress Rating	IP65	
Light Immunity Rating	>100,000lux	
Panachrome+ Controller Specifications		
Controller dimensions	239mm x 172mm x 51mm	
Voltage requirements	Universal AC supply 85 to 240VAC or 15 to 48VDC	
Power consumption	30W maximum with detectors fitted and indicators ON	
Door operator relay:	250V AC, 24V DC at 5A	
Trigger Duration	350mS typical 2D, 1 second typical 3D	
Timeout:	Switched ON/OFF 10-70 seconds adjustable	

Ordering Information

Part No.	Product Description	Profile
SMART-3DS-S-01-000	Smart 3D, Surface Mount, Stainless Colour	.
G2540 000	Set of 2D TX, RX Detectors and Fixing Kit	43mm
G2510 000	Set of 2D TX, RX Detectors and Fixing Kit	10mm
G2510 803	Clamp kit to fit one detector	.
G3851 000-NA	Panachrome+ Controller	.
015 455	4m extension cable to fit one detector	.

This product is designed for use in elevators with powered automatic doors where the closing energy is less than 10J in normal operation and less than 4J during de-activation of the light curtains or less as per EN81 requirements. It should be installed by qualified personnel only, therefore any use outside of this application is at the installer's own risk and should be assessed appropriately. As a result of our policy of continual improvement, the information in this document is subject to change without notice and it is intended only as general guidance on product performance and suitability. This information shall not form part of any contract.