

SAFETY RADAR S101A

Radar Sensor S101A

S101A

S101A radar sensor, 30° wide, 15° narrow, symmetrical
FOV, 1.6m/s

- Immune to smoke, dust and water splashes
- Can be used Outdoors
- -40 to +60°C
- SIL2, PLd
- 4m safety area



PRODUCT DESCRIPTION

The Inxpect S101A is the world's first safety radar sensor certified to SIL2/PLd standards, offering advanced protection for industrial environments. Utilizing 24 GHz FMCW radar technology and proprietary detection algorithms, it provides reliable 3D volumetric coverage, ensuring accurate detection of both static and moving objects within a 4-meter range. The sensor features two fixed-angle detection fields—narrow (50° horizontal, 15° vertical) and wide (110° horizontal, 30° vertical)—allowing for adaptable safety configurations.

Designed to withstand challenging conditions, the S101A operates effectively in environments with dust, smoke, and fluids, minimising false alarms. Its high-sensitivity mode detects micro-movements, such as breathing, to prevent unintended machine restarts. The sensor communicates motion data and diagnostics via CAN bus to the control unit, ensuring seamless integration into safety systems. With a restart timeout of 10 seconds and a maximum target speed of 1.6 m/s, the S101A is a robust solution for safeguarding personnel in dynamic industrial settings.

TECHNICAL DATA

Detection method	4
IP class	IP67
Life span	20 years
Manufacturer part no.	90202011
Material of body	PA6.6
MTTFd	45
PL	d
Safety category	2
SIL	2
Temperature range fixed use from	-30 °C
Warning field max	4 m

