# Press release

# Safe even with dust and smoke

The LBK radar system from Leuze is now also available with a CIP safety interface. Persons in the danger zone are reliably detected by the 3D radar system from Leuze, even in harsh conditions – static objects do not lead to shutdown.

*Owen, September 1, 2025 –* People must not be allowed to enter dangerous working ranges of machines or transportation paths unnoticed. Dust, welding sparks or sawdust make this a challenge for safety technology: It must always reliably detect people, even under these conditions. This is where the safe LBK 3D radar system from Leuze comes in. It recognizes people’s bodies even under harsh environmental conditions and monitors the protected area for their access and presence. Practical: The radar technology detects both moving and stationary persons – static objects such as pallets or containers, on the other hand, do not cause the safety signal to be switched off. The 3D radar principle means that areas on steps, pedestals and behind non-metallic shadowing can also be monitored.

**CIP safety included**

The LBK safety radar system includes a separate controller. The controller is now also available with an integrated CIP safety interface. CIP Safety stands for “Common Industrial Protocol Safety” – an extension of the globally used CIP protocol. It allows secure, standardized integration into EtherNet/IP-based safety networks. Alternatively, controllers with PROFIsafe or FSoE interfaces are also available to users for integration into safe fieldbus systems. The safe 3D radar system is quick to set up: With the LBK Designer configuration software, system operators can easily adapt the system parameters to the respective application. As well as data transmission via cable, there is the option to use an SD memory card for configuration.

**Efficient use**

The safe LBK 3D radar system gives system operators the advantage of a flexible solution: The system is suitable for monitoring non-visible working ranges in front of and inside machines as well as for restart protection. The radar system can also be used to guard access to material transfer stations. The solution is also ideal for safeguarding the routes of transfer cars, AGVs or cranes – especially in open areas or environments with reflective surfaces along the route. The radar system uses adjustable lobes with warning and protective fields to monitor the transportation path. Switching errors cannot be triggered by the environment or ambient light because it only detects people.

**Also secures large areas**

Each controller is connected to up to six sensors. This means it can also cover larger areas. With four channel configurations per controller, system operators can use up to 24 sensors in one application.

The protected area can be conveniently adapted to the application: All you have to do is determine the number and position of the sensors and configure the length, opening angle and width of the area. Certified safety experts from Leuze can provide support with project planning and commissioning on request.

Characters: approx. 3,051  
   
Please send a sample copy.  
Interviews available upon request.

**Image material**



Figure 1: Leuze has developed the safe LBK 3D radar system for monitoring hazardous areas in harsh industrial

environments. It detects human bodies, allowing it to monitor the protected area for their access and presence.

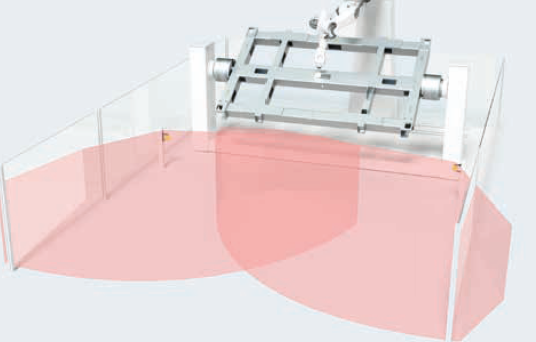


Figure 2: The LBK 3D safety radar system protects the hazardous working ranges of machines against access by and

presence of people – even with dirt, welding sparks, sawdust or moisture.

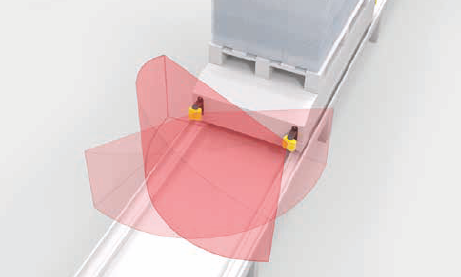


Figure 3: The LBK radar system’s sensors use adjustable lobes with a warning and protective field to safeguard the transportation path of transfer cars, AGVs or cranes. It can do this without erroneous switching caused by the environment or ambient light, because it only detects people.

*With over 60 years of experience, Leuze has become an expert in innovative and efficient sensor and safety solutions in automation technology. Today, around 1,600 Sensor People worldwide use curiosity, passion and determination to drive progress and change. Their motivation is the lasting success of their customers in a constantly changing industry. Leuze offers its customers an individual competitive advantage through intuitive and reliable solutions for safe and non-safe position detection. For example, switching and measuring sensors, identification systems, solutions for data transmission and image processing. As a family-owned company and safety expert, the company also focuses on components, services and solutions for occupational safety. Thanks to their broad and in-depth application expertise in the machine and system construction, the Sensor People are a competent and flexible partner for customers with a wide range of industrial requirements.* [www.leuze.com](http://www.leuze.com)

**Leuze electronic GmbH + Co. KG T** +49 7021 573-0 Press enquiries: Martina Schili

In der Braike 1 **F** +49 7021 573-199 **T** +49 7021 573-116

73277 Owen info@leuze.com martina.schili@leuze.com

www.leuze.com

**Leuze electronic GmbH + Co. KG T** +49 7021 573-0 Press enquiries: Martina Schili

In der Braike 1 **F** +49 7021 573-199 **T** +49 7021 573-116

73277 Owen info@leuze.com martina.schili@leuze.com

www.leuze.com