### **Sensor Portfolio**

#### Sensor Features





Feature	LBK-S01	SBV-01	
Frequency Range	24,00 24,25 GHz	60,6 62,8 GHz	
Detection Principle	FMCW modulation, motion detection		
No of Detection Fields (safe)	2	4	
Detection Field Range	4m	5m	
Detection Field Angle, horizontal / vertical	50° / 15°, 110° / 30°	10° 100°, 10° increment / 20°	
Min Restart Time	10s	4s	
Connectors	2 M12, 5-pin, IN / OUT		
Housing Material	PA66	PA66 (front), aluminum (back)	
Diagnosis Output	object distance	object distance and angle	



#### Controller Features







Feature	ISC-03	ISC-02	ISC BUS PS
Inputs	2, dual channel		
Outputs	2, dual channel (safe) / 4, single channel (non-safe) OSSD outputs		
Switching between Configurations via Inputs	up to 4 different sensor configurations		
Switching between Configurations via Fieldbus	-	-	up to 32 different sensor configurations (PROFIsafe)
Synchronisation of Controllers	up to 4 controller		
Fieldbus Communication	-	Modbus TCP (non-safe)	PROFIsafe (safe) Modbus TCP (non-safe)
Configuration	USB	Ethernet / USB	Ethernet / USB
Connectable Sensors	LBK-S01, SBV-01		

## Safety at Leuze

# Leuze

## The new safety radar sensor and controller improve the capability of the product family, expanding range, scanning area, and communication.

The new SBV-01 safety radar sensor has been updated with added functionality including switching fields, bus communication, and OSSD outputs. Improvements include:

- Increased detection field range of 5 meters- the scanning field can be adjusted from 10 to 100 degrees in 10-degree increments (up to 100 degrees) by 20-degree 3D cone.
- Has an aluminum plate installed to eliminate radar bounce back- this eliminates the need for external shielding.
- Number of protective fields are increased to 4 (previous generation has 1-2)
- A total of 3 controllers are available based on your application needs.

Three new controllers available to use with the SBV-01:

- 1. ISC BUS PS
  - Provides Profinet/Profisafe communication and data transfer-beneficial for Siemens PLC users or other PLCs that have Profinet communication.
  - 32 different sensor configurations (switched via fieldbus) and can synchronize with up to 2 other controllers to ensure no cross-talk.
- 2. ISC-02 controller
  - With Modbus TCP (non-safe) connectivity for diagnostics and configuration.
  - Up to 4 switchable configurations via discrete inputs.
- 3. ISC-03 controller
  - most basic unit, USB connectivity, with all the functions standard to the controller family.

Standard functions of the three new controllers include:

- · configurable inputs- restart, estop, muting
- · Configurable outputs warning field, muting enable
- 4 switchable field configurations discrete input