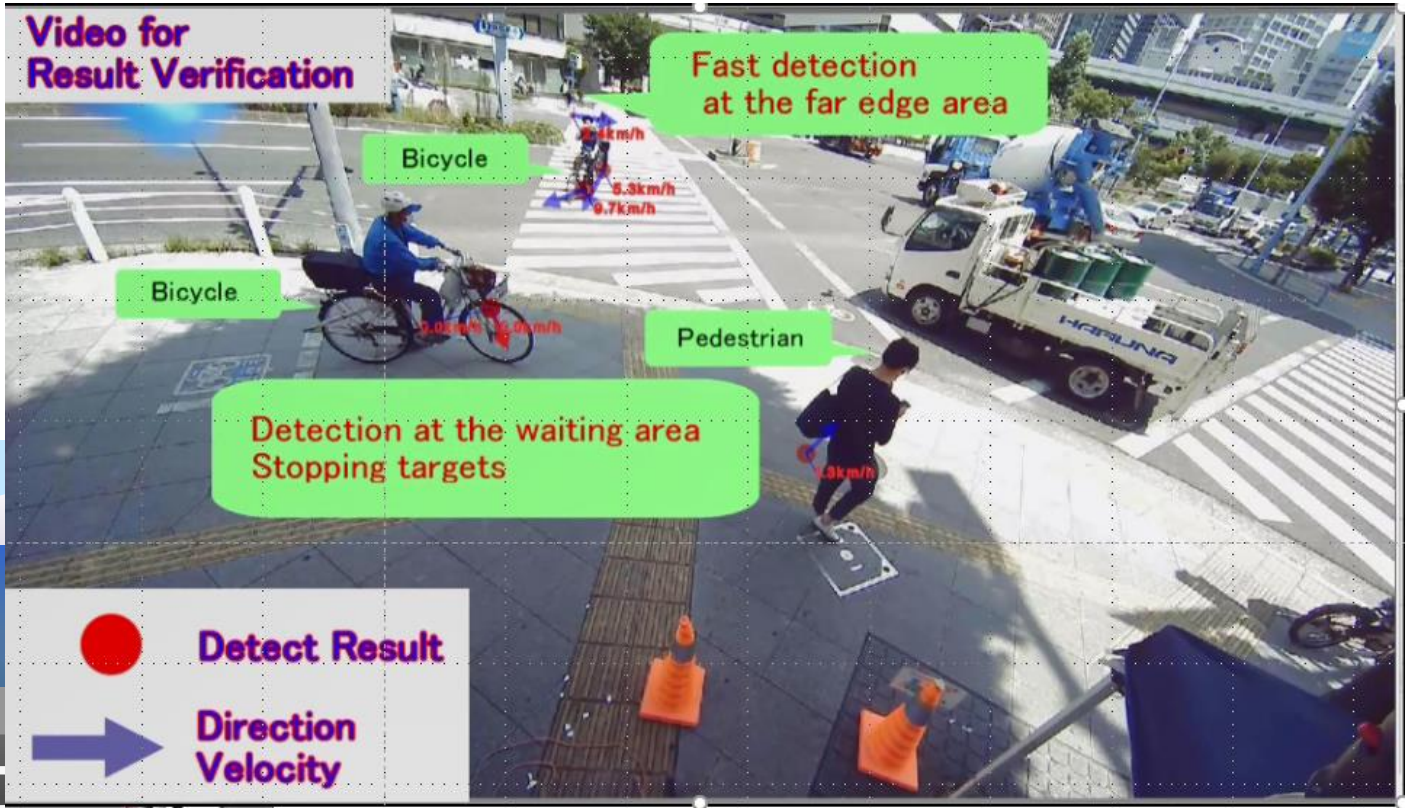
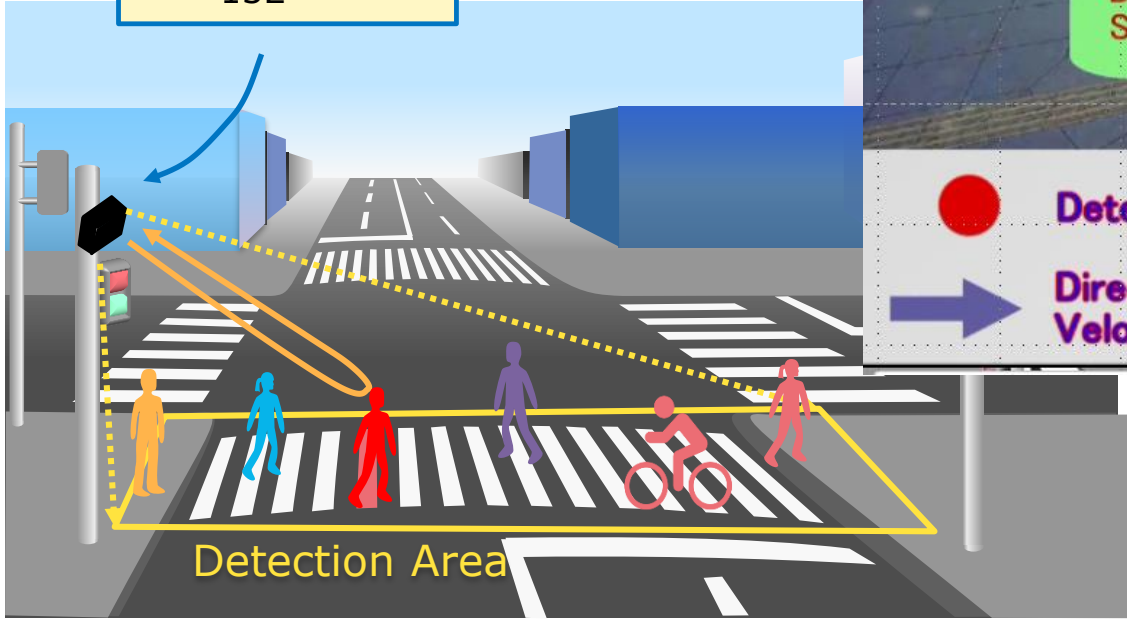




# Millimeter-wave Radar for Pedestrian Detection

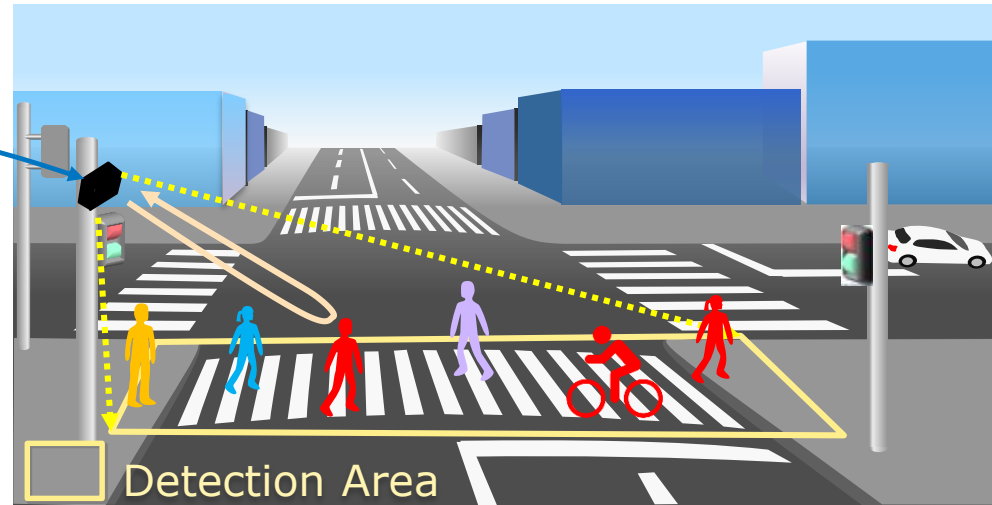
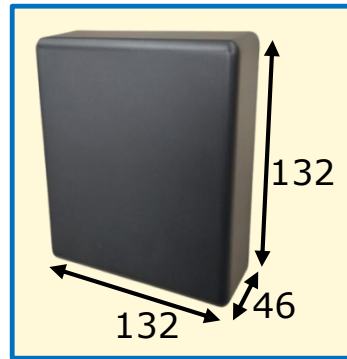
Systems & Electronics Division  
Sumitomo Electric Industries, Ltd.  
Date: September, 2024

# SEI's Radar for Detecting Pedestrians



**Experience in Japan since 2017  
Will be launched in the U.S. in 2024**

# SEI's Radar for Detecting Pedestrians



## ◎ Large coverage range

Cover most of the crosswalks  
[55 x 30m]

## ◎ Continuous tracking

Even the radio wave is temporarily blocked

## ◎ Multiple

4 radars can be set without interference

## ◎ Near side detection

Can be installed to existing poles

## ◎ Stopping targets

Able to detect pedestrians standing still

## ◎ Compact and Inexpensive

Low cost for installation and maintenance

# Why choose SEI's Radar

Item	SEI's Radar	Lidar	Camera
Detection Area	Great!	Good	Good
All lighting	Great!	Good	Modest
All weather	Great!	Good	Modest
Maintenance	Great!	Modest	Modest
Shape and Color	None	Good	Great!

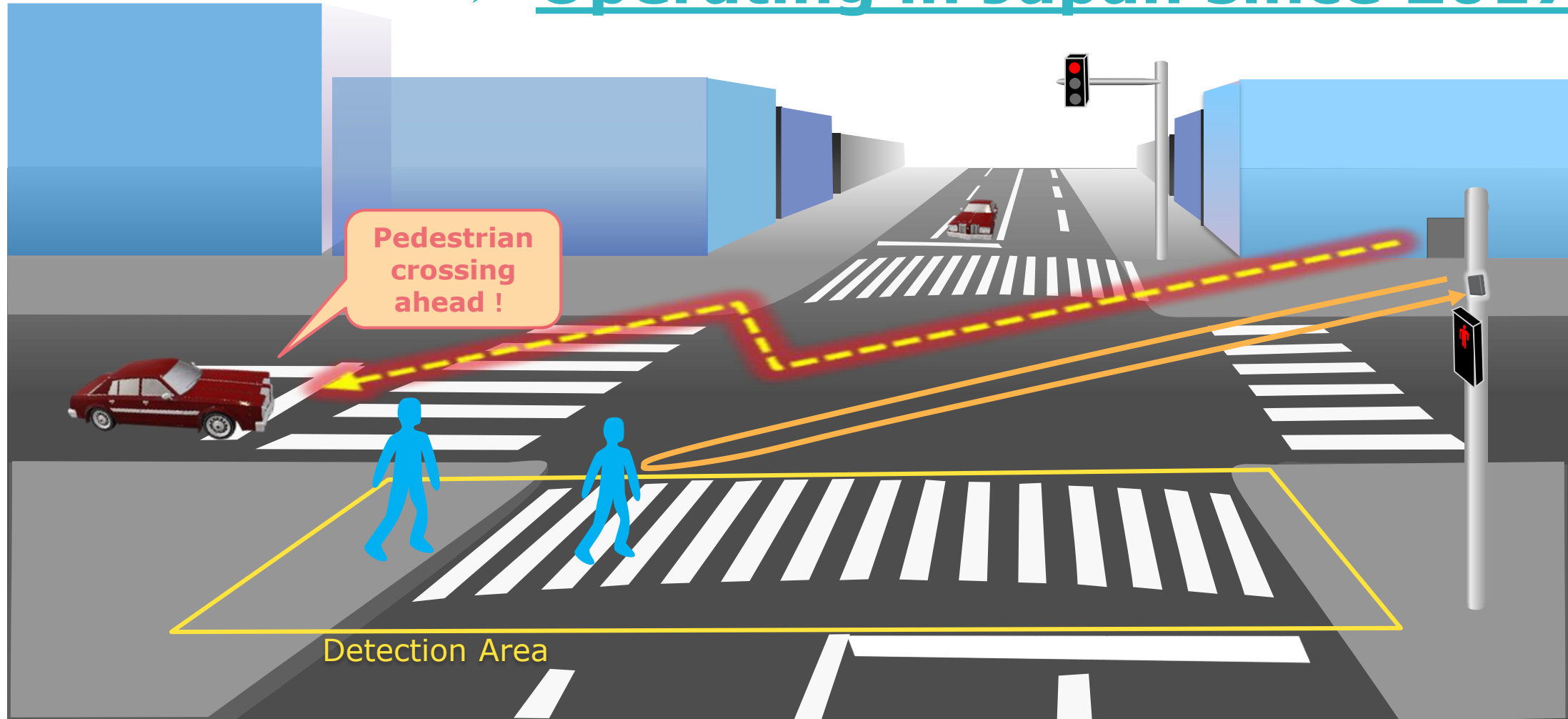
# Use Case for traffic signal control

- Signal extension for pedestrian Safety
- Optimize the signal length for Efficiency



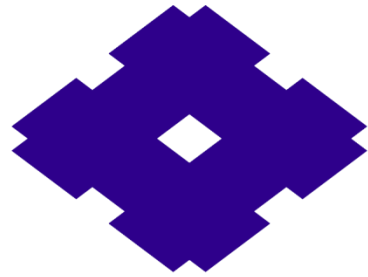
# Use Case for warning drivers

## ➤ Operating in Japan since 2017



# Specifications

Item	General	Remarks
External Dimensions	132 × 132 × 46 mm	Excluding mounting bracket
Weights	Less than 1 kg	Excluding mounting bracket
Installation	Height 3 to 5 m	
Radar Frequency	61.0-61.5GHz	ISM Band, FCC compliance
Max. Detection Area (Length / Width)	55m × 30 m	required "setback" = 1.5m (depends on the height)
Output Data	position, velocity, direction counts	
Interface	Ethernet	output every 100ms
Installation Adjustment	Easy set-up with PC tool	



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