

- Power DC 12V
- Radio function: 76-77 GHz radar
- Method: FMCW
- Maximum detection distance: 150 m
- Distance accuracy: ± 0.2 m
- Distance resolution: 0.45 m
- Detection speed range: -200 to +400 km/h
(+ : approach)

Hyundai Mobis Res

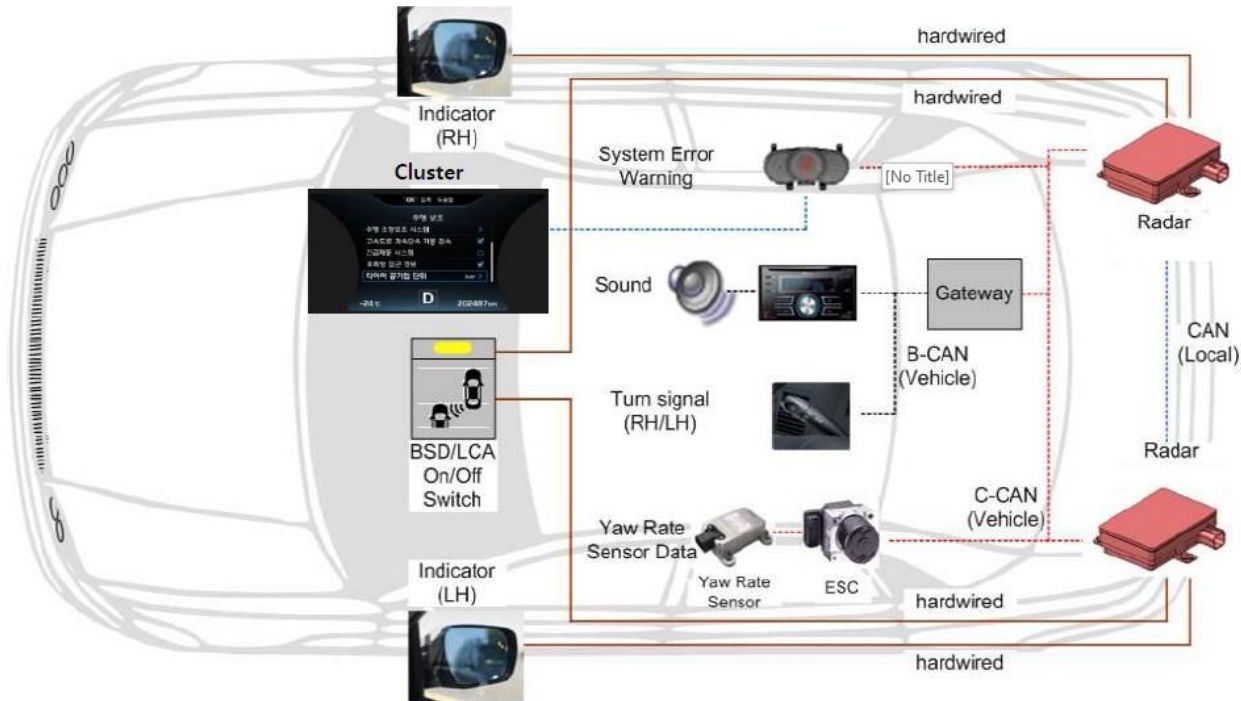
<Key Specifications>

Model		MAR130
Frequency		77GHz
Detection Range	Max	150m
	Min	0.9m
Range	Accuracy	± 0.2m
	Resolution	0.45 m
Velocity	Range	-200~+400km/h
	Accuracy	± 0.25km/h
	Resolution	0.6km/h
Azimuth	Max FOV	150°
	Separation	7°
Elevation	FOV	$\pm 5^\circ @ < 60$ m
	Accuracy	2.0°
Etc	Mounting Capability(EOL)	$\pm 5^\circ$ (Azimuth, Elevation)
	Auto alignment	$\pm 7.5^\circ$ (Azimuth), $\pm 5.0^\circ$ (Elevation)
	HSM	Y
H/W	MCU	NXP RRU2
	MMIC	NXP Barracuda
	Size	66.2 x 88.4 x 15.1 mm
	Weight	120 g
Cycle time		50ms
ASIL		B
Interface		2ch HSCAN or CANFD

Outline

- ❑ Blind-spot Collision Warning (BCW) and Blind-spot Collision Avoidance (BCA)
- ❑ Rear Cross Collision Warning (RCCW) and Rear Cross Collision Avoidance Assist (RCCA)
- ❑ Safe Exit Assist (SEA)

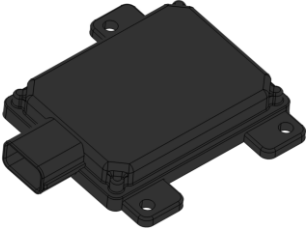
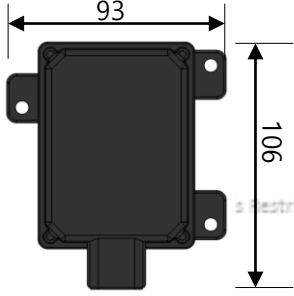
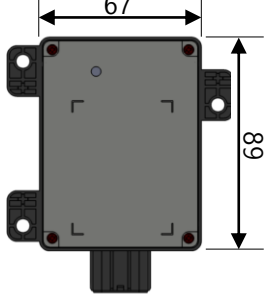
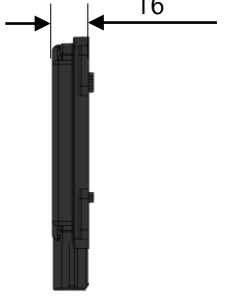
System Composition



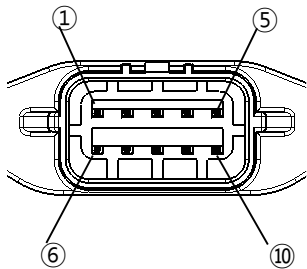
■ HW Specifications

Dimension

Size	67 x 89 x 16 mm 93 x 106 x 16 mm
Weight	120g

	ISO VIEW	Top	Bottom	Side
MAR130				

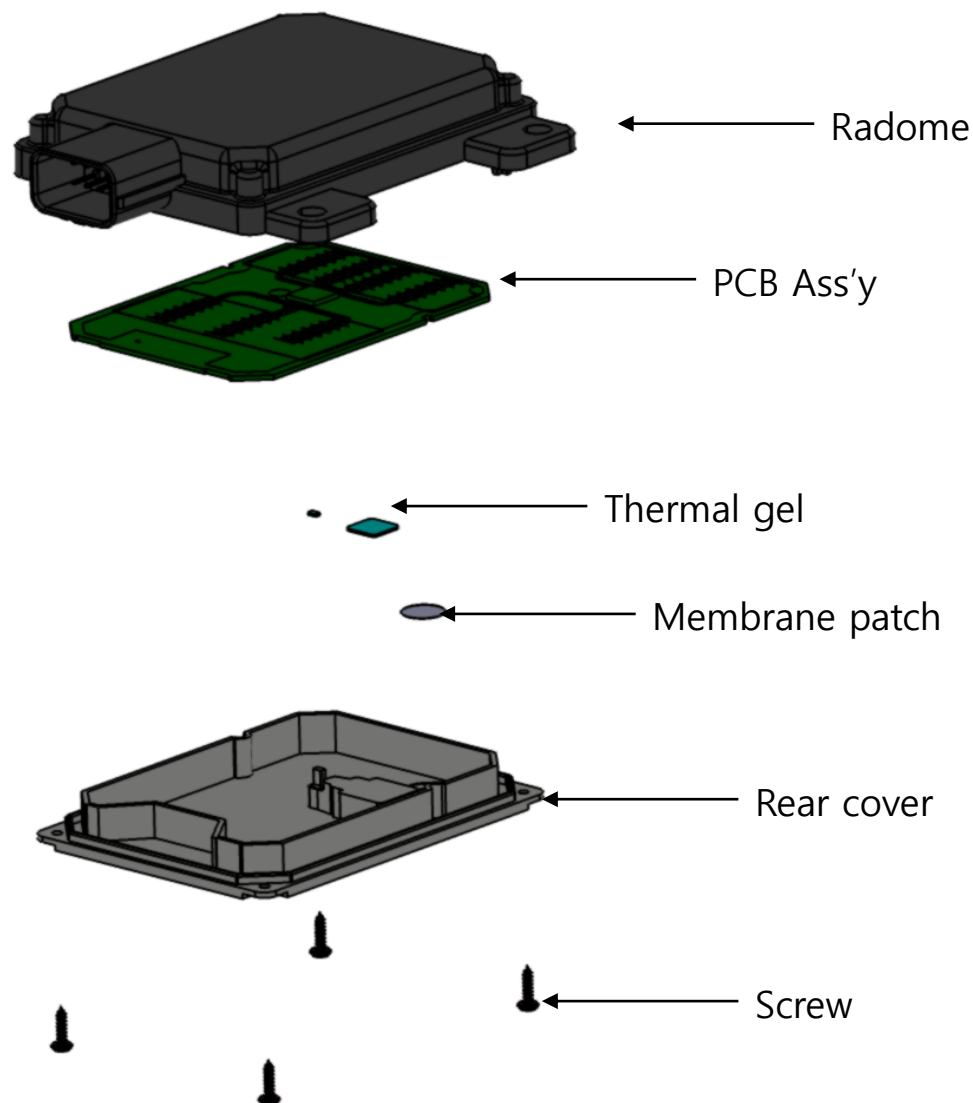
Connector Pin Map



Supplier : KET
Unit View

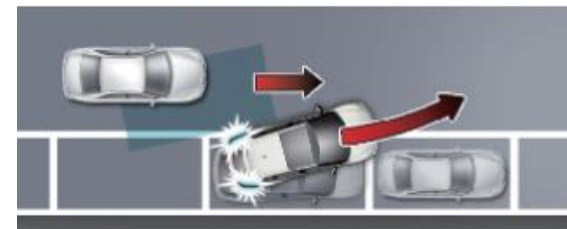
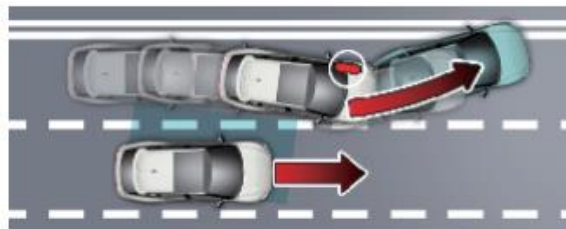
PIN NO.	Pin NAME	DESCRIPTION	PIN NO.	Pin NAME	DESCRIPTION
1	L-CAN_LO	PRIVATE CAN LOW	6	GND	GND
2	L-CAN_HI	PRIVATE CAN HIGH	7	E-CAN_LO	VEHICLE CAN LOW
3	IGN1	IGN1 SIGNAL (KL15)	8	E-CAN_HI	VEHICLE CAN HIGH
4	WARNING IND	CONNECTING TO THE SIDE-MIRROR PART	9	B+	POWER (KL30)
5	-	-	10	-	-

■ MAR130 - Exploded view



BCA(Blind-Spot Collision-Avoidance Assist)

- Blind-Spot Collision-Avoidance Assist help to detect and monitor approaching vehicles in the driver's blind spot area and warn the driver of a possible collision with a warning message and audible warning.
- In addition, if there is a risk of collision when changing lanes or driving forward out of a parking space, Blind-Spot Collision-Avoidance Assist will help avoid collision by applying the brake.



SEW(Safe Exit Warning)

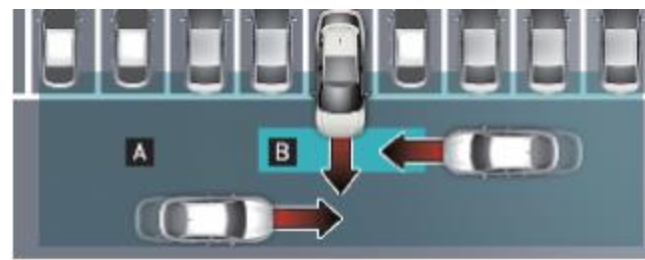
- After the vehicle stops, when an approaching vehicle from the rear area is detected as soon as a passenger opens a door, Safe Exit Assist will warn the driver with a warning message and an audible warning to help prevent a collision.



Hyundai

RCCA(Rear Cross-Traffic Collision-Avoidance Assist)

- Rear Cross-Traffic Collision-Avoidance Assist help to detect vehicles approaching from blind spot area while your vehicle is reversing and warn the driver that a collision is imminent with a warning message and an audible warning. Also, braking is assisted to help prevent collision.



[A]: Rear Cross-Traffic Collision Warning operating range

[B]: Rear Cross-Traffic Collision-Avoidance Assist operating range

USA

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CAUTION TO USERS Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Hyundai Mobis Restricted

RF Exposure Statement (MPE)

The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

Canada

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1) L'appareil ne doit pas produire de brouillage; 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure Statement (MPE)

The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times. This device must not be co-located or operating in conjunction with any other antenna or transmitter.