### **Automotive Radars**

Achieve dual frequency band,

76.5GHz (BW=1GHz) and 79GHz (BW=4GHz)

mm-radar (76.5/79 GHz)





### **Specification**

Parameter	Spec
Frequency Range	76~77GHz (1GHz BW) *1 77~81GHz (4GHz BW) *1
Method of continuous wave	FM-CW
Target Moving Speed	-1000 ~ +1000 km/h *2
Speed step	0.1 km/h
Delay range	3 ~ 350m(0.1mStep) *3
Delay accuracy	≦±0.1m
RF port	
Interface	WR12/UG387Umod (IN/OUT)
Nominal level at RF port	-25dBm
IF monitor port	
Interface	SMA-female: 2Port
Output power	-35dBm (Typ.)
Operating temperature	+10 ~ +40°C
Operating humidity	RH35 ~ 85%
Storage temperature	-20 ~ +60°C
Power supply	AC100-240V 50/60Hz
Dimension	430(W) x 230(H) x 480(D) (mm)
Weight	≦ 25kg

\*1 Switching by touch panel \*2 available to adjust more or less than ±300km \*3 "may be possible to set less than 5m and greater than 255.9m under certain conditions".



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The RTS Instrument Simulates the **Velocity and Position of a Vehicle** 





**Millimeter Wave Collision Avoidance Radar Simulator** 

The Microwave Factory Radar Target Simulator (RTS) enables you to evaluate the performance of millimeter wave avoidance radars and systems.

It supports both of 76.5GHz (BW=1GHz) and 79GHz (BW=4GHz) bands.

The RTS system simulates a virtual vehicle's Relative Velocity by adjusting the reflected radar signal's doppler shift. It simulates virtual target distance and size through adjustments of the reflected signal's amplitude and return time of arrival using delay and level adjust circuits. Analog delay circuits allow the user to simulate a wide range of close-in distances.

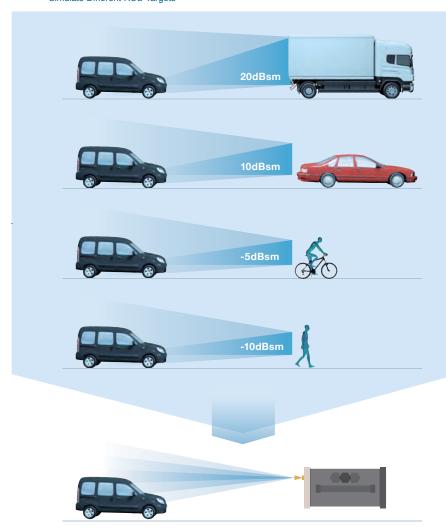






## **Radar Cross Section**

Simulate Different RCS Targets



# **RTS**



### **Relative Velocity**

Controllable Relative Velocity: Doppler +/- 1000km/h with 0.1km/hr Step Size



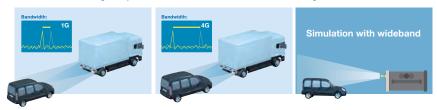
### **Distance**

Controllable Measurement Distance from 5 to 350m with a 0.1 Step Size



### **Bandwidth**

The Wideband Analog Delay Line Enables The Simulation of Close-in Targets



### **Environment**

Enables the Testing and Validation of Critical Performance in a Safe Lab Environment

