

# PREVIEW<sup>®</sup> SIDE TURN ASSIST 79

79 GHZ SHORT RANGE RADAR

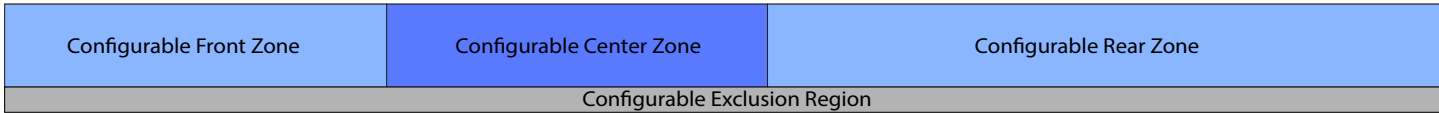


## PERFORMANCE

- UN Regulation No. 151 Compliant
- 79 GHz FMCW
- Side Turn Assist (STA) Operation
- Lane Change Assist (LCA) Operation
- 180° Horizontal Field of View
- Configurable Area of Interest including fore, aft and width
- Flexible installation window

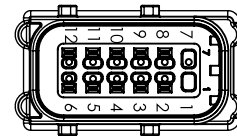
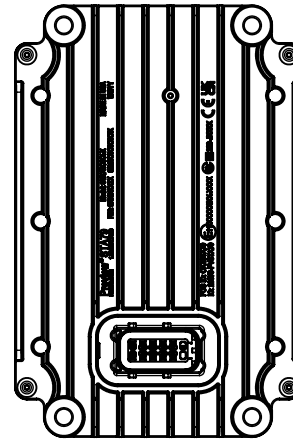
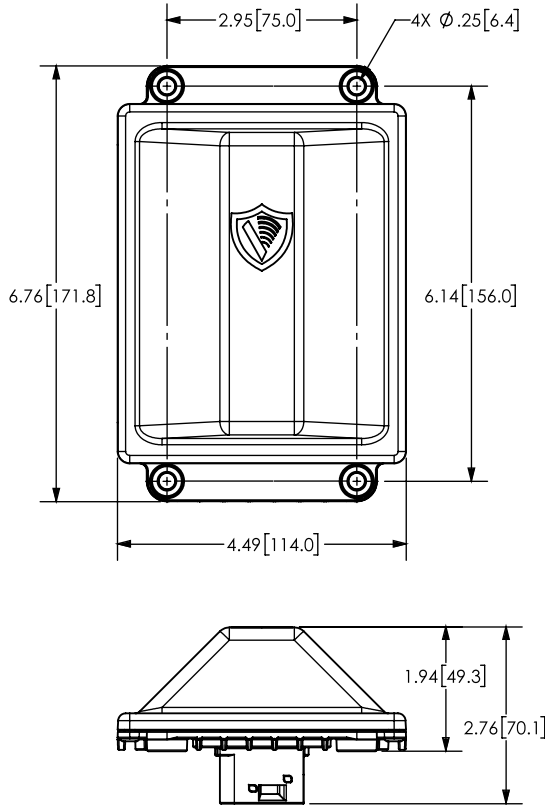
## SPECIFICATIONS

<b>Frequency Band</b>	78.6 - 79.4 GHz, FMCW Waveform
<b>Communication Interface</b>	2x CAN 2.0b. J1939 250/500 Kbits/sec. (1 Mbps/sec. option)
<b>Detection Range from Side</b>	UN Reg No. 151 or Configurable up to 5 m
<b>Detection Range to Front</b>	UN Reg No. 151 or Configurable up to 48 m
<b>Detection Range to Rear</b>	UN Reg No. 151 or Configurable up to 48 m
<b>Center Zone</b>	Configurable to cover the vehicle length up to 10 m to front and 48 m to rear from sensor mounting location
<b>Exclusion Region</b>	Configurable from 0-1.5 m (default .5 m)
<b>Range Resolution   Range Accuracy</b>	0.2 m   $\pm 0.2$ m
<b>Vertical Beamwidth</b>	$\pm 5$ degrees
<b>Azimuth Field of View</b>	$\pm 90$ degrees for -4dBsm target
<b>Max Doppler Velocity</b>	STA $\pm 28.6$ m/s   LCA $\pm 53.6$ m/s
<b>Doppler Resolution</b>	STA 0.5 m/s   LCA 1 m/s
<b>Doppler Accuracy</b>	STA $\pm 0.2$ m/s   LCA $\pm 0.4$ m/s
<b>Number of Raw Targets and Target Tracks</b>	Up to 64
<b>Update Rate</b>	60 ms (a CAN bus target message is provided in every cycle)
<b>Input Power</b>	9-33V. up to 0.6 A max.
<b>Auxiliary Output</b>	Active State: Switch to ground, sink up to 1 A, over current protected   Inactive State: High Impedance
<b>Operating/Storage Temperature</b>	-40° to +85° C   -55° to +105° C
<b>System Diagnostics</b>	Built in Self Test (BIST), Sensor Blockage Warning, Missing Speed Signal
<b>Enclosure</b>	IP6K9K
<b>Connector Type</b>	TE GET64, HDSCS 12 pin (10 pins populated)



## DIMENSIONS AND PIN-OUT

All dimensions are in millimeters



CONNECTOR END VIEW  
TE GET64, HDSCS 12 PIN

E- Mark: E11\*10R06/02\*12861\*00.  
Japan MIC STA79: 209-J00497

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