ViSight Auto Gen2

4D IMAGING RADAR

VELDAR
REVEALING WHAT'S AHEAD

ViSight Auto is a high performance, W-band, 4D imaging radar designed and built by Veldar for automotive and traffic monitoring applications. It is ideal for applications that require high resolution all-weather vision, like pedestrian detection, collision avoidance, and autonomous driving.

4D IMAGING
Delivers range, azimuth, elevation, and velocity data for all points in the radar point cloud.

ALL-WEATHER OPERATION
Vehicle and pedestrian imaging and obstacle detection in degraded visual environments (DVE) including low light, fog, smoke, rain, and snow.

FLEXIBLE CONFIGURATIONS
Provides several modes of operation, allowing the user to select the range, resolution, frame rate, and data rate combination that best matches their application.

USER-CONFIGURABLE OUTPUTS
Generates multiple data types for mapping the driving environment. Choose from radar images, radar point clouds, and target tracks.
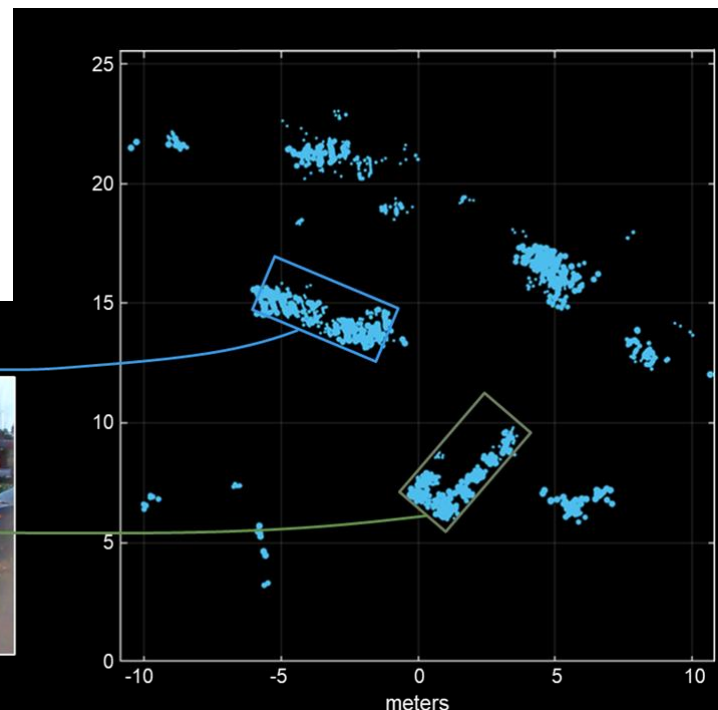
MULTIPLE PROCESSING OPTIONS
Process onboard or stream images and raw radar data to a host computer through the built-in 10 GbE interface.
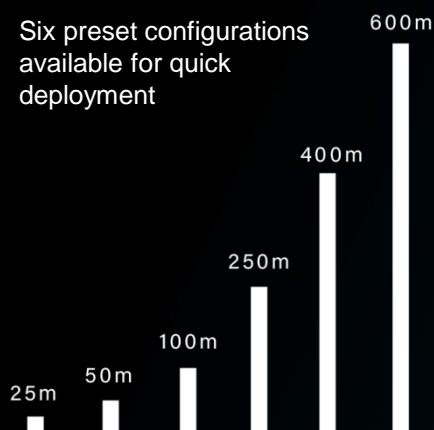
SMALL OBJECT DETECTION
Sensitivity (with SNR > 15 dB)
- Traffic cones (-10 dBsm) @ 150 m
- Pedestrians (0 dBsm) @ 300 m
- Small cars (10 dBsm) @ 600 m

Radar Range Modes

Six preset configurations available for quick deployment

600m

400m

250m

100m

50m

25m

ViSight Auto Specifications

PERFORMANCE

Range Resolution	0.1 - 2.5 m (user selectable)
Azimuth Resolution	1 deg
Elevation Resolution	2 deg
Velocity Resolution	0.5 - 2.5 m/s (user selectable)
Velocity Max Unambiguous	5 - 100 m/s (user selectable)
Azimuth FoV	100 deg
Elevation FoV	16 deg
Frame Rate	10 - 30 fps

PHYSICAL & ELECTRICAL

Dimensions	13 x 9 x 4 cm
Weight	< 700 gm
Power Consumption	< 20 W
Input Voltage	12 – 48 VDC
Data Interface	Gigabit Ethernet

ENVIRONMENT

Dust and Water	IP67
Operating Temperature	-40 to +85 deg C
Vibration	High vibration environments