

CABIN MONITORING & SENSING

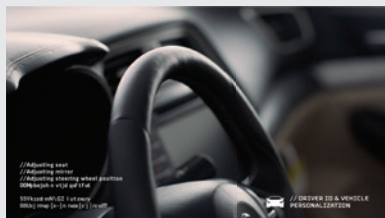
For decades, Gentex has designed and manufactured automotive-grade cameras engineered for precise applications, integrating millions into vehicles each year. And only Gentex has the skill sets necessary to integrate cameras into the rearview mirror. Discretely hidden behind glass, with an ideal view of the vehicle cabin — constantly monitored by the driver. A high-performance, cross-platform location offering scalable features.

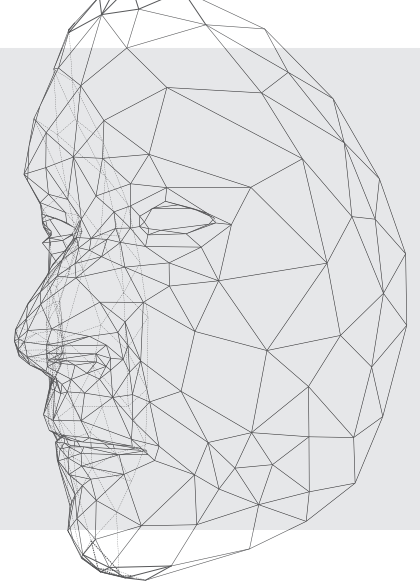
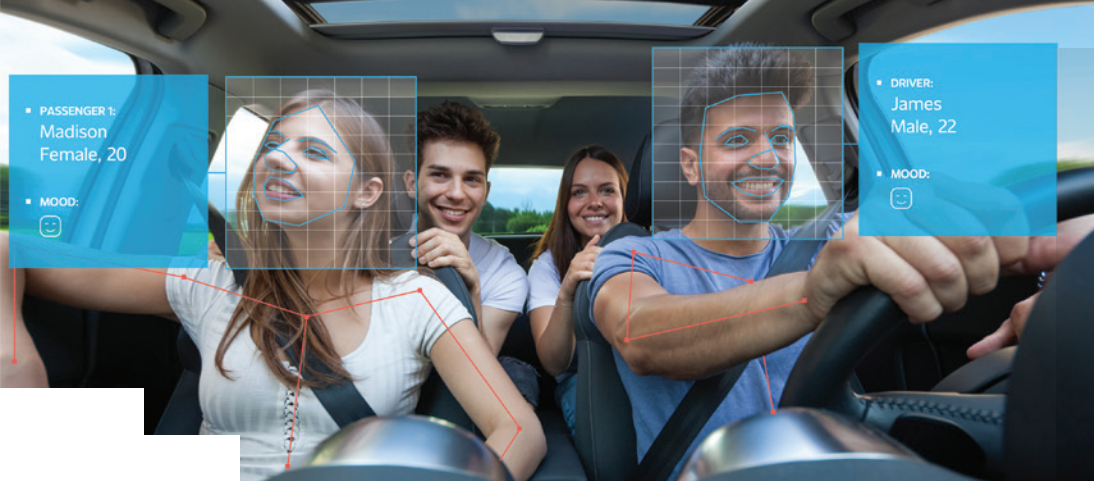
BIOMETRICS

Gentex's iris-based biometric authentication delivers customized security, comfort and convenience features. The system consists of an iris-scan camera, near-infrared emitters, and system intelligence discretely integrated into the rearview mirror assembly.



- Theft protection / vehicle operation — authorizes ignition and establishes driving privileges and / or restrictions
- Cabin personalization — adjusts mirrors, steering wheel, seat, GPS locations, etc
- Secure access to cloud-based services — vehicle to infrastructure (V2i) transactions such as payment for tolls, gas, coffee, fast food, etc.





DRIVER MONITORING

Using an interior camera combined with system intelligence, Gentex's mirror-integrated driver monitoring system (DMS) can determine:

- Gaze location and behavior
- Driver alertness, drowsiness or distraction
- Readiness for return of manual control from autopilot

CABIN MONITORING

Next-gen systems must not only monitor the driver, but also the passengers and the entire vehicle cabin. Gentex's in-cabin monitoring system incorporates passenger activity by tracking:

- Occupant detection
- Passenger posture and behavior
- Objects left behind
- Restraint optimization

CABIN SENSING

Gentex in-cabin sensing units use a variety of sensing methods to detect chemicals and airborne particulates to monitor air quality and provide safety and security.

- Detects smoke, vape, VOCs, alcohol, etc. for increased passenger safety and improved vehicle maintenance in autonomous vehicles
- Monitor cabin air quality and identify explosive or incendiary components during the boarding process in aerospace applications

