



Making Roads Safer Across the Globe

AI-Powered ADAS, DMS & Fleet Safety
Solutions for Zero-accident Operations



2005 Founded

Global Presence



\$250M+
Group

2600+
Employees

100+
Engineers
In AI/CV/ML

150+
Patents



Vision

Make Roads
Accident-Free



Mission

Be the preferred safety
partner for OEMs,
fleets & enterprises



THE PROBLEM WE SOLVE — THE FLEET REALITY



95% of accidents are caused by human error

Fatigue, distraction & speeding remain the silent threats your fleet faces every day



Fleets still run with fragmented visibility

You can track the vehicle — but not the high-risk behaviors happening inside it



New safety mandates are becoming unavoidable

KSA, India & global regulators now require ADAS, DMS & real-time driver monitoring



Issues are caught too late

Traditional systems alert after a violation — not early enough to prevent an accident.

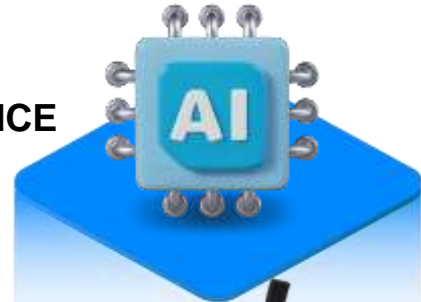
There has to be a smarter, more proactive way to keep drivers and fleets safe

NOVUS SOLUTION ARCHITECTURE

THE 3-LAYER AI SAFETY STACK

Built by India's Deep Tech Leader in AI, ML & Computer Vision

AI
INTELLIGENCE



INTELLIGENT
HARDWARE



REAL-TIME
ANALYTICS



Where Novus Leads the Industry



Trained on **600TB+** global driving data



AI optimized for **edge cases**: night, weather, pedestrians, road curvature



In-house **ADAS & DMS deep-learning models** (100+ AI/ML/CV engineers)



Vision models tuned **for multi-terrain, multi-light, multi-vehicle** conditions

Novus Safe Pro - AI at the Edge



Forward Collision, Pedestrian & Vehicle Detection



Speed Limit Compliance



Distraction, Phone Usage & Smoking Alerts



Lane Departure Alerts



Drowsiness, Fatigue & Yawning Detection

Novus OmniFleet Platform



Trip & violation monitoring



Predictive risk modelling



Driver coaching module (App + Dashboard)



Driver scorecards



Video evidence library



Fleet risk heatmaps



Configurable alerts & compliance reports

HOW IT WORKS

Stage 1 - Perception

Dual cameras capture
HD cabin & road data

- Road-facing + driver-facing vision
- Real-time video input for AI analysis



Stage 2 - AI Intelligence

AI-models detect violations instant

- ADAS & DMS engines analyze every frame
- Identifies distraction, fatigue, collisions, lane drift, etc.
- On-device inference ensures millisecond response



Stage 3 - Action

Real-time response to
protect drivers & fleets

- Audible alerts to drivers
- Instant upload to OmniFleet
- Coaching delivered to driver app
- Fleet managers receive actionable insights



DEPLOYMENT SCALE & DATA ENGINE



200K+

Drivers Protected



120K+

Vehicles Enabled with
ADAS/DMS



7 Billion+

KMs Driven



600TB+

Driving Data Analysed



10+

Countries



Use by Fortune

500 companies

GLOBAL CUSTOMERS TRUSTED BY INDUSTRY LEADERS



NAQEL
EXPRESS



amazon



DP WORLD

NIPCO



NAYARA
ENERGY



Nestlé

INDUSTRIES WE SERVE

BUILT FOR COMPLEX FLEET OPERATIONS



Logistics &
Transportation



E-Commerce &
Parcel Delivery



Fuel &
Petrochemical
Fleets



FMCG &
Food Distribution



Employee
Transportation



Industrial &
Supply Chain
Fleets

A proven safety ecosystem powering global fleets
across industries and continents

OEM INTEGRATIONS & PARTNERSHIPS

TATA MOTORS

Collaboration on ADAS hardware, in-vehicle integration, safety stack compatibility

Architecture-ready SDK/API for OEMs

Compliance with global automotive safety protocols

25

Design Wins From OEM

20

Design in Production

50%

Indian CV OEM Market

VE COMMERCIAL VEHICLES
A VOLVO GROUP AND EICHER MOTORS JOINT VENTURE



Vinod Aggarwal
Managing Director & CEO
Volvo Eicher Commercial Vehicles

“I am deeply impressed with Hi Tech Robotics, their products & the state of art technologies they are developing in domain of mobile robots, ADAS and autonomous systems.

We have been using more than 80 mobile robots over the past few years, which has led to substantial productivity enhancement as well as flexibility in our operations.”

DAIMLER



Erich Nesselhauf
Ex. Managing Director & CEO
Daimler India Commercial Vehicles

“We are happy to partner with The Hi-Tech Robotic Systemz Limited for our new Driver State Monitoring System. Safety is a core attribute of Bharat Benz, and this innovative feature can help prevent accidents related to driver drowsiness or inattentiveness.”

PATENTS & GLOBAL CERTIFICATIONS



ISO, AIS, IEC certifications



Saudi-Specific Compliance



IMPACT DASHBOARD

PROVEN SAFETY OUTCOMES

Key KPIs Delivered



AI VIDEO ANALYTICS

DETECTION CAPABILITIES

Heart Rate: 72

Mood: Neutral

NOVUS HI-TECH

3D Face Surface

Left Eye Openness | Right Eye Openness

Inner Brow Raiser	0.00	Calling
Outer Brow Raiser	0.00	Drinking
Brow Lowerer	0.00	Drowsiness
Upper Lid Raiser	0.35	Distraction
Cheek Raiser	0.00	Seatbelt
Lid Tightener	0.00	Smoking
Nose Wrinkler	0.00	Texting
Upper Lip Raiser	0.00	
Lip Corner Puller	0.00	
Dimpler	0.00	
Lip Corner Depressor	0.00	
Chin Raiser	0.00	
Lip stretcher	0.00	
Lip Tightener	0.00	
Lips part	0.00	
Jaw Drop	0.00	
Lip Suck	0.00	
Left Eye Status:	Open	
Right Eye Status:	Open	
Drowsiness Scale [KSS]:	1	
EAR LEFT:	0.271740	
EAR RIGHT:	0.281861	
Yawn:	0	
Person ID:	PRAS0007	
Glasses:	No	
Avg Gaze Angle [Yaw]	0.070939	
Avg Gaze Angle [Pitch]	0.082641	
Left Eye Gaze [X, Y, Z]:	-36.4, -122.7, 430.6	
Right Eye Gaze [X, Y, Z]:	15.9, -120.6, 421.4	

Distracted Driving

Drowsiness / Fatigue Detection


Smoking Alerts

Seatbelt Detection

Let's Build Safer, Smarter & Zero-Accident Fleets Together

Request a Live Demo

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