GLEC AI DTG

World-Class AI Transformation Platform

World's leading integrated solution for transforming old freight trucks into advanced AI vehicles
AI-based safety enhancement and international standard carbon measurement and reduction system

AI Transformation (AX) for Old Freight Trucks

Upgrade existing freight trucks to smart vehicles with cutting-edge AI technology
Simultaneously achieve driver safety and environmental protection

AI-Based Driver and Cargo Safety Enhancement

Detect driver fatigue, drowsiness, and distraction through real-time AI inference
and provide immediate alerts.
Continuously monitor cargo status to prevent accidents and ensure safe transportation.

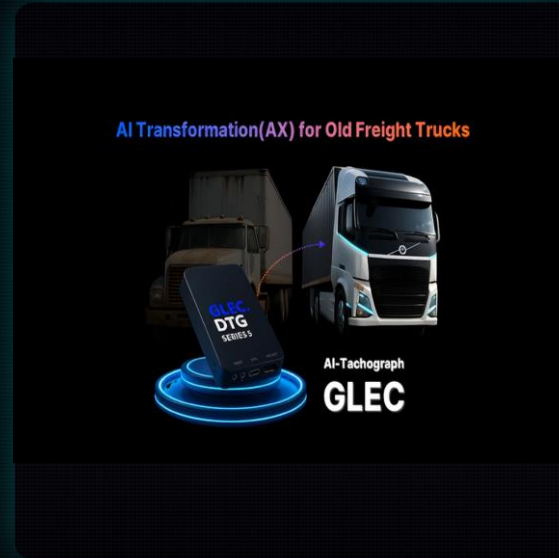## AI-Based International Standard Carbon Measurement and Reduction

Precise carbon emission measurement system complying with ISO-14083 international standards.
Monitor real-time carbon emissions and maximize fuel efficiency through AI optimization
to effectively reduce carbon emissions.

GLEC AI DTG

Next-generation AI digital tachograph that monitors and optimizes
driver safety and vehicle efficiency in real-time

Real-time AI Inference System

Immediate risk detection and response possible with high-precision sensors
and edge AI computing.
Real-time analysis of driver status, road conditions, and cargo status
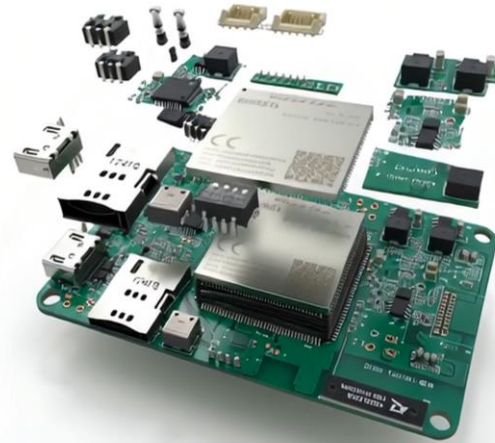to prevent accidents and ensure safe operation.

LTE Connectivity & Cloud Integration

Transmit real-time data to the cloud through cost-effective LTE network
and provide insights through big data analysis.
Real-time integration with vehicle control center enables immediate
response and optimization.

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GLEC AI Dashboard

Integrated AI dashboard system that visualizes and analyzes
vehicle operation data in real-time to provide optimal transportation efficiency

Real-time Data Visualization

Intuitive interface allows drivers and managers to grasp all information at a glance.
Monitor and analyze all data including vehicle location, route, fuel consumption,
carbon emissions in real-time.

AI Voice Conversational Agent

Real-time AI voice recognition and conversation system provides immediate emergency safety alerts
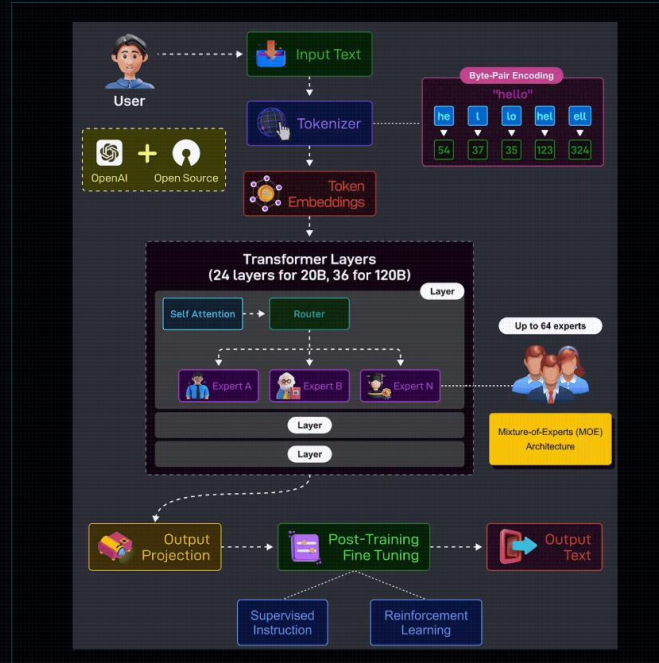to drivers.
Voice warnings during hazardous situations reduce accident rates by over 20%, supporting safe driving through natural conversations with drivers.

Cutting-Edge AI & API Technology

GLEC AI - 20B LLM Real-time Inference Engine

AI SAFETY

20B Parameter LLM

4-bit quantization for real-time inference with embedded weights from accident-prone area datasets (weather, time, location patterns)

Real-time Data Integration

CAN Protocol data, GPS tracking, live traffic incidents, and congestion information processed as real-time embedding weights

Vehicle Context Protocol (VCP)

Proprietary data integration standard for analog truck sensors, enabling extended embedding weights from legacy vehicle systems

Urgency-based Inference

Context-aware AI that prioritizes safety and carbon reduction with differential sensitivity, delivered through real-time voice agent

40%
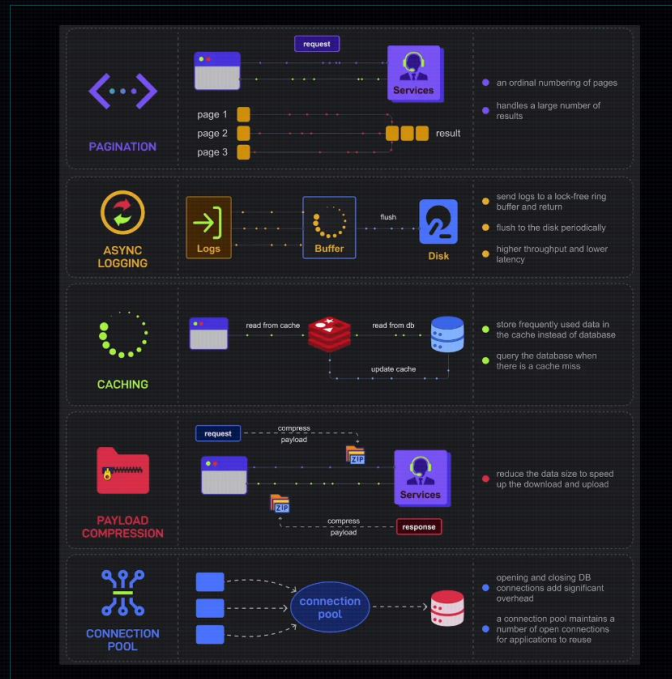ACCIDENT REDUCTION

20B
PARAMETERS

<100ms
RESPONSE TIME

Cutting-Edge AI & API Technology

GLEC API - ISO-14083 Carbon Measurement Platform

CARBON NEUTRAL

request

Services

page 1
page 2   result
page 3

PAGINATION

- an ordinal numbering of pages
- handles a large number of results

ASYNC LOGGING

Logs   Buffer   flush   Disk

- send logs to a lock-free ring buffer and return
- flush to the disk periodically
- higher throughput and lower latency

CACHING

read from cache   read from db

update cache

- store frequently used data in the cache instead of database
- query the database when there is a cache miss

PAYLOAD COMPRESSION

request   compress payload   ZIP

Services

ZIP   compress payload   response

- reduce the data size to speed up the download and upload

CONNECTION POOL

connection pool

- opening and closing DB connections add significant overhead
- a connection pool maintains a number of open connections for applications to reuse

ISO-14083 Standard

Complete API implementation of international freight carbon emission measurement standard for global compliance

Real-time Quantification

Instant carbon footprint calculation enabling eco-driving awareness and behavior modification for drivers

Supply Chain Reporting

Enterprise-grade carbon emission reporting for regulatory compliance and sustainability initiatives

Carbon Credit Infrastructure

Core platform for transport carbon credit issuance, enabling monetization of emission reductions
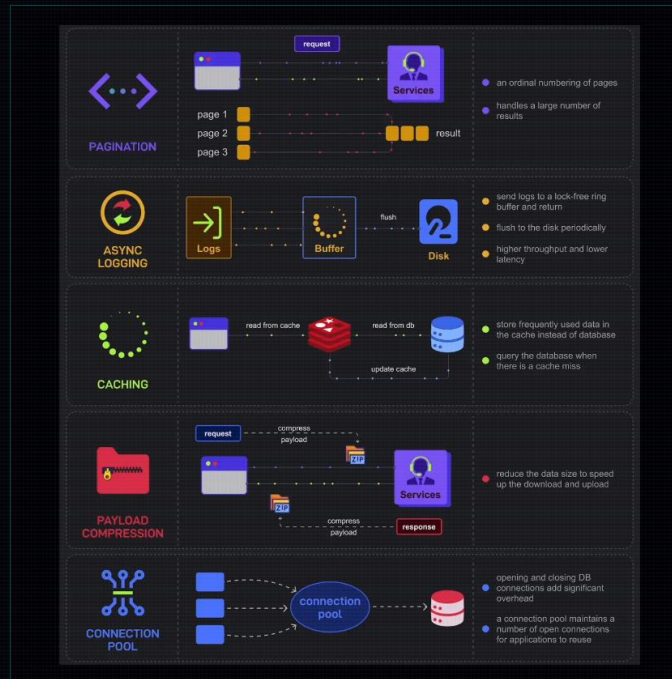
Seamless DTG Integration

GLEC API works in perfect harmony with GLEC DTG hardware, creating a comprehensive ecosystem for sustainable logistics transformation. Real-time data from vehicles flows through our API, providing actionable insights for both drivers and fleet managers.

Cutting-Edge AI & API Technology

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READY TO TRANSFORM YOUR FLEET?

Join the AI innovation in transportation. Experience world-class safety, efficiency, and environmental benefits with GLEC AI DTG solutions. Contact us today to start your digital transformation journey.

CES 2026
CONSUMER ELECTRONICS SHOW

Meet Us at CES 2026

Experience the Future of AI Transportation

Join GLEC at the world's most influential tech event. Discover our innovative AI DTG solutions and see how we're transforming the transportation industry with cutting-edge artificial intelligence.

Dates	Location	Venue
January 6-9, 2026	Las Vegas, Nevada	Eureka Hall

Booth
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