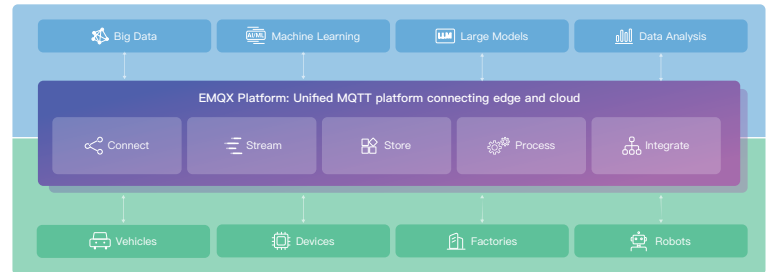# EMQ

About EMQ

EMQ is a global leader in providing edge–cloud connectivity and data solutions. EMQ facilitates data collection, transmission, transformation, storage, analysis, and control between devices and digital systems with its high–performance MQTT messaging hub **EMQX Platform** and other software solutions. EMQ helps businesses tackle data challenges across various scenarios, such as connected vehicles, smart manufacturing, smart buildings, energy management, retail, robotics, and maritime shipping. Founded in 2017, EMQ's flagship product, **EMQX Platform**, serves nearly 1,000 enterprise customers in over 60 countries, connecting more than 250 million smart devices worldwide.

#1
MQTT platform and MQTT protocol contributor

600+
Enterprise customers worldwide

80%
Global automakers choose EMQ products

50%
Clean energy power generation is related to EMQ products

70%
Fortune Global 500 companies use EMQ products

75
IoT companies expanding globally trust EMQ products

| Big Data | Machine Learning | Large Models | Data Analysis |

EMQX Platform: Unified MQTT platform connecting edge and cloud

Connect · Stream · Store · Process · Integrate

| Vehicles | Devices | Factories | Robots |

EMQ Products

EMQX Platform – MQTT Platform for Automotive

Scalable MQTT platform that helps in–vehicle communication and vehicle–to–cloud communication.
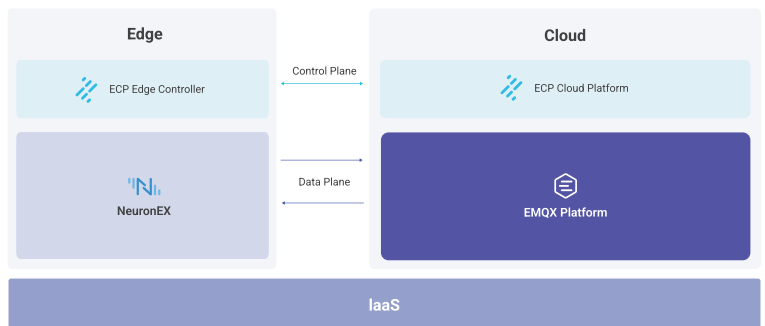
NeuronEX – Edge Gateway

Real–time access to edge data, focusing on protocol conversion and data processing, providing real–time access and analysis of vehicle data.

EMQ SDV Flow – Vehicle–to–Cloud data solution

Offer a unified solution for real–time processing of in–vehicle data, using MQTT, MQTT over QUIC, and industry formats like Parquet and BLF for data handling.

EMQX ECP – Edge–Cloud Data Manage Platform

A unified platform to manage edge and cloud data, helping fast deployment of edge services, remote maintenance, and centralized management.

Edge — Cloud
ECP Edge Controller — Control Plane — ECP Cloud Platform
NeuronEX — Data Plane — EMQX Platform
IaaS

Customers

Connected Vehicle

Smart Manufacturing

Energy and Utilities

Financial Services

Telecommunication

Robotics

Retail and others

US Office: 305 Vineyard Town Center, #140 Morgan Hill, California

Europe Office: Frankfurt | Eschborner Landstraße 42–50 Haus B, 60489 Frankfurt(M), Germany

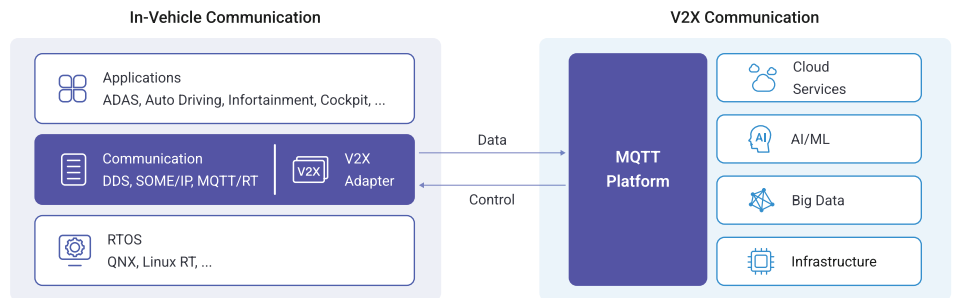**Stockholm** | Mazarinvägen 36 Sköndal, Stockholm, Sweden

Contact Us: https://www.emqx.com/en/contact

🌐 www.emqx.com

In-Vehicle and V2X Communications with MQTT and EMQX Platform

EMQ offers **EMQX Platform** — a modern, proven, cutting-edge MQTT platform that unifies MQTT broker, rules engine, and stream processing for the automotive industry. We pioneer **MQTT over QUIC**, the next-gen standard protocol for IoV messaging, serving over 50 automotive companies and connecting more than 10 million EVs and connected vehicles.

Why EMQX MQTT Platform for Automotive?

Unified Platform

EMQX is an all-in-one platform offering multi-protocol connectivity, scalable MQTT broker, rules engine, and real-time data processing capabilities.

Security

EMQX offers advanced security features, including TLS/SSL encryption, authentication, and access controls, to safeguard sensitive information in connected cars.

Scalability and Reliability

Effortlessly connect millions of vehicles for large-scale automotive applications. Transfer data between vehicles and the cloud reliably with no data loss.

Real-Time Communication

EMQX utilizes MQTT for efficient real-time data transmission, making it particularly well-suited for automotive scenarios with limited bandwidth and unpredictable network conditions.
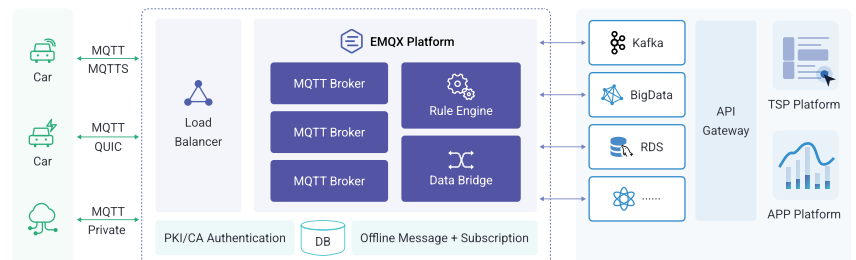
Interoperability

EMQX fully supports MQTT and 70+ industrial protocols, enabling interoperability with various devices, vehicles, and systems in the automotive industry.

Observability

EMQX offers real-time monitoring and analytics, allowing manufacturers and connected car providers to track vehicles, message traffic, and metrics in real time.

Modern Architecture for IoV and V2X Platform

EMQX Platform, the world's leading MQTT broker, now offers **MQTT over QUIC** for enhanced IoV communication. It enables scalable, secure, and reliable connections for millions of vehicles to the cloud. Effortlessly integrate telemetry data from connected cars with enterprise systems, big data analytics, AI/ML models, and various cloud services.

Tech Hightlights

Scalability

- ✓ Effortlessly connect over 10 million vehicles to the cloud.
- ✓ Transfer and process millions of MQTT messages per second.
- ✓ Scale to a 20+ node cluster with the core-replica architecture.

Reliability

- ✓ Reliable MQTT message delivery with QoS 0,1 & 2 guarantee.
- ✓ High availability with a masterless distributed architecture.
- ✓ Up to 99.99% uptime for your business-critical applications.

Security

- ✓ Encrypt bidirectional MQTT connections over TLS/SSL.
- ✓ Authenticate with password, JWT, PSK, X.509 certificates, etc.
- ✓ Fine-grained access control for MQTT topic publish/subscribe.

Interoperability

- ✓ 100% compliant with MQTT 5.0 and 3.1.1 standards.
- ✓ Compatible with 30+ open-source MQTT client SDKs.
- ✓ Data integration with 40+ databases and cloud services.

5 out of 10	**7 out of 10**	**10+ million**	**100+**	**50+**
Largest automobile companies	Electric vehicle startups	Automobile companies	Car models	EVs and cars