

# The MQTT Platform for IIoT in Automotive Manufacturing



HiveMQ is the enterprise MQTT platform that lays a powerful foundation for modernizing factory operations in automotive manufacturing. It solves data connectivity and interoperability challenges by providing a secure, reliable, and scalable data abstraction layer between OT and IT systems. HiveMQ helps automotive manufacturers achieve digital transformation by integrating data from factory machines, systems and applications to enterprise and cloud platforms, enabling advanced data processing and analytics use cases.

## **Digital Transformation and Industry 4.0**

Automotive manufacturers face several pressures such as supply chain disruptions, unplanned downtime, quality control issues, and increased regulation of plant operations that are impacting their ability to improve operations and meet increasing demands. Automotive manufacturers are increasingly turning to the integration of digital technologies like Industry 4.0 and Industrial IoT (IIoT) to solve data management problems.

## Automotive manufacturing can derive these benefits from digital transformation:



# Increase Overall Equipment Efficiency (OEE):

Measure the performance, availability, and quality of equipment and find areas for improvement.



# Improve operational efficiency:

Monitor KPIs, identify areas of inefficiency, streamline processes, and take action to improve productivity.



# Improve product and service quality:

Detect quality issues and take action early to improve quality while reducing rework and scrap.

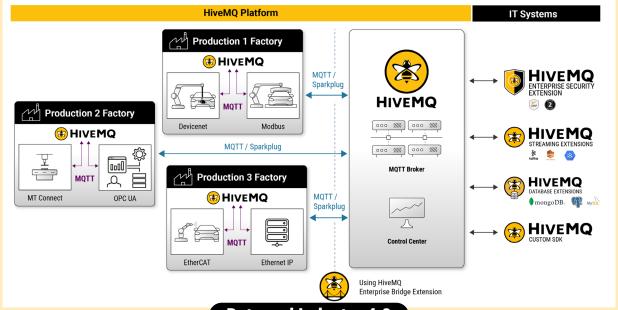


# Reduce supply chain disruptions:

Enhance supply chain visibility for better inventory management and faster response to disruptions.

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Data and Industry 4.0

The first and most significant frontier to achieve digital transformation and Industry 4.0 is data collection and movement. Data from manufacturing machines, processes, and applications are captured and stored via key ingestion technologies and need to be moved from OT to IT, where it is stored in a data center or enterprise cloud. This data-rich environment enables advanced initiatives such as machine learning, AI, adaptive control, and digital twins.

## **HiveMQ Platform For Automotive Manufacturing**

HiveMQ solves the challenges of data collection and movement in automotive manufacturing by adding a reliable, scalable and secure data abstraction layer between OT and IT systems that enables heterogeneous machines and processes to work together seamlessly even in constrained environments.

## The key benefits of the HiveMQ MQTT platform that is trusted by over 130 customers are:



#### **Business Critical Reliability:**

Operate mission-critical systems reliably 24/7 with zero message loss and redundant clustering technology.



#### **End-to-End Security:**

Ensure applications and data meet the highest security standards with end-to-end encryption and configurable security controls.



#### **Scalability to Support Growth:**

Add any number of sites and scale to millions of connected devices seamlessly with a linear design for scalability



#### **Observable Insights:**

Troubleshoot and keep all factory systems running as planned with tools and metrics for transparency and observability.



## Flexible Integration:

Focus on your core business instead of using developer resources with OT-IT data integration into enterprise applications and infrastructure like Apache Kafka.



## Simple-to-Deploy:

Achieve rapid time-to-value with a platform that is flexible enough to deploy on-premise, in any cloud, or via the fully-managed and feature-rich HiveMQ Cloud offering.

Scan the QR code to learn more about the HiveMQ Solution for Automotive Manufacturing



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