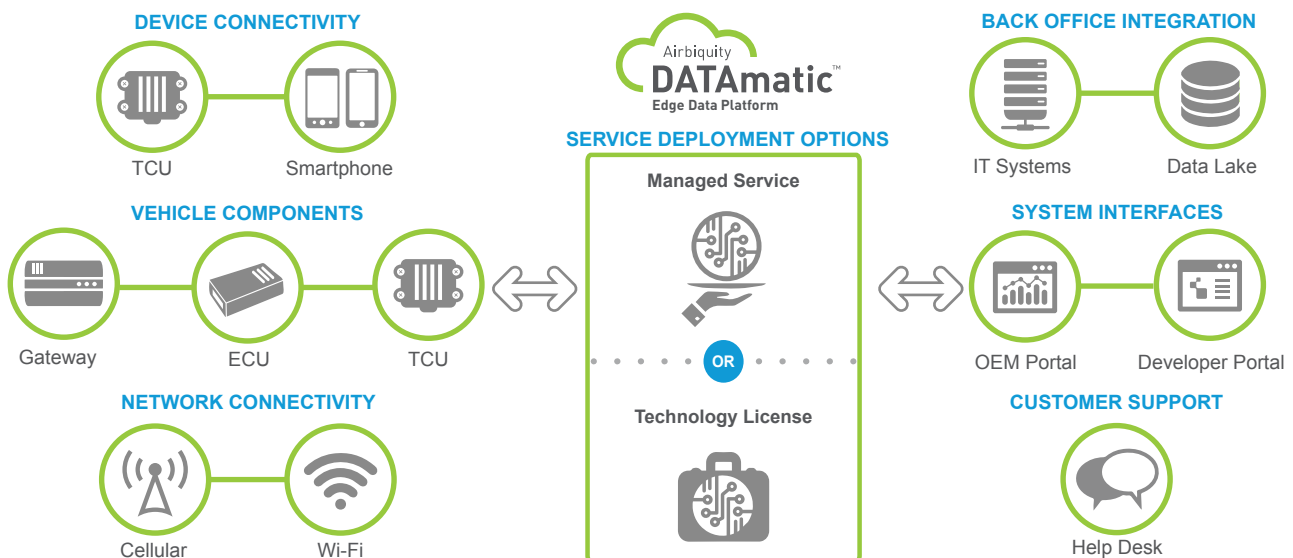**Airbiquity®**

DATAmatic™: Edge Data Platform

Connected vehicles have quickly become the norm, and the data generated by those vehicles is exponentially increasing in volume, diversity, and economic value to manufacturers and their ecosystems. Additionally, the continued evolution of electric drivetrain, autonomous driving, personalized services, and real-time applications is reliant on access to data and analytics both on-board the vehicle at the "edge" as well as off-board in the cloud. The ability to maximize data value extraction while mitigating transmission expenses, working within target device resource limitations, and protecting consumer privacy will be essential to the success of any manufacturer's data strategy and related programs.

Airbiquity addresses these challenges with the DATAmatic Edge Data Platform, a comprehensive solution for dynamic edge analytics and data acquisition that leverages a hybrid edge and cloud environment to give manufacturers the control they need across the entire data management lifecycle. DATAmatic Edge Data Platform provides a secure and sophisticated analytic module development environment and deployment capability while ensuring proper use of available edge target device resources. DATAmatic Edge Data Platform also supports a variety of distributed electrical architectures easing integration into vehicle platforms, systems, and components.

DATAmatic Edge Data Platform Features

- Create edge data analytic modules that are written once and automatically optimized to run on many target devices
- Simplify analytic module development testing and validation using readily available tool chains and emulators
- Protect core functions of target devices, systems, and vehicles against excessive data analytics resource utilization

- Easily identify what data elements are available from individual vehicles, ECUs, and analytic modules
- Dynamically designate what data parameters are collected at what frequency and for what duration
- End-to-end data security, privacy management, and compliance
- mLink option for smartphone-assisted data management

DEVICE CONNECTIVITY
TCU — Smartphone

VEHICLE COMPONENTS
Gateway — ECU — TCU

NETWORK CONNECTIVITY
Cellular — Wi-Fi

Airbiquity DATAmatic™ Edge Data Platform

SERVICE DEPLOYMENT OPTIONS
Managed Service
OR
Technology License

BACK OFFICE INTEGRATION
IT Systems — Data Lake

SYSTEM INTERFACES
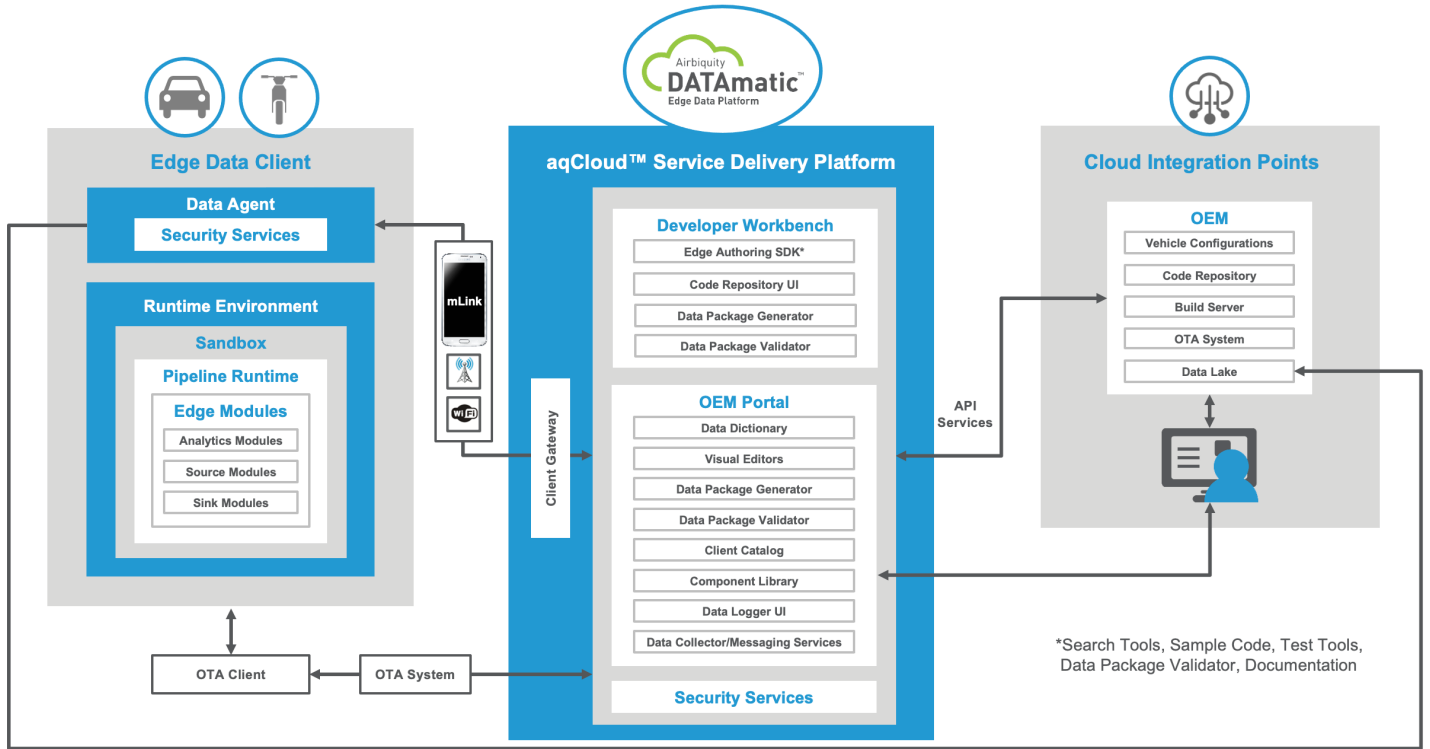OEM Portal — Developer Portal

CUSTOMER SUPPORT
Help Desk

Integration and Service Support

- Developer Edge Authoring SDK
- Client SDK with Source Code
- Back Office IT System APIs

- Business Intelligence and Reporting
- Customer Service Help Desk
- Available Integration Services

DATAmatic Edge Data Platform: Architecture

Edge Data Client

Data Agent
- Security Services

Runtime Environment

Sandbox

Pipeline Runtime

Edge Modules
- Analytics Modules
- Source Modules
- Sink Modules

mLink

Client Gateway

OTA Client — OTA System

aqCloud™ Service Delivery Platform

Developer Workbench
- Edge Authoring SDK*
- Code Repository UI
- Data Package Generator
- Data Package Validator

OEM Portal
- Data Dictionary
- Visual Editors
- Data Package Generator
- Data Package Validator
- Client Catalog
- Component Library
- Data Logger UI
- Data Collector/Messaging Services

Security Services

API Services

Cloud Integration Points

OEM
- Vehicle Configurations
- Code Repository
- Build Server
- OTA System
- Data Lake

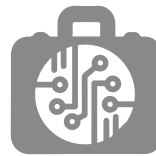*Search Tools, Sample Code, Test Tools, Data Package Validator, Documentation

DATAmatic Deployment Options

DATAmatic Edge Data Platform can be deployed using a managed service model or technology license model to best meet the management and business requirements of automakers and automotive suppliers.

Managed Service

Technology License

Airbiquity: Proven Leader and Trusted Partner

Airbiquity is a global leader in connected car service delivery and pioneer in the development and engineering of automotive telematics technology. We lead the industry in automotive telematics deployments worldwide, and maintain established business partnerships with the most influential ecosystem players across the automotive and telematics industries. Airbiquity has the deployment-proven technology, platform, services, and expertise to make your connected car program a success.

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