The Internet of Things has been widely used in various fields and promotes innovations of industry services and business modes, exerting great influences on the value chain, supply chain, and industrial ecosystem. However, the IoT is a large and complex system covering different industries and various application scenarios. Connections and management of many terminals, and real-time analysis and processing of a large amount of data become tough problems in industry digital transformation.

**EC-IoT Solution**

To respond to these challenges, Huawei Launches EC-IoT Solution. Huawei Edge Computing IoT (EC-IoT) solution includes the terminal communication module, edge computing IoT gateway (AR series IoT Gateway), and Agile Controller. Terminal communication modules support intelligent connections of sensor network terminals; edge computing gateways provide intelligent services nearby; the Agile Controller provides open APIs and eSDKs to connect to industry application systems of different partners. Based on the cloud managed architecture, the Agile Controller achieves intelligent connections and highly efficient management of considerable terminals of different industries.

The EC-IoT Solution applies to various industries. It provides full-process industry services and business mode innovations, and provides the support for innovative operation and services such as improved efficiency in R&D and production, predictive maintenance, and VAS operation. It greatly improves the product quality and reliability, and reduces maintenance and service costs, promoting industry digital transformation.
Features and Benefits

- **Innovative Edge Computing, Realizing Real-Time Service Analysis and Intelligent Decision-Making**
  
The Edge Computing gateway with edge computing can be flexibly equipped with the lightweight app to predict and detect potential faults quickly, or execute local policy, and respond within milliseconds.

- **Managing Tens of Millions of Terminals in the Cloud, Reducing O&M Costs by 50%**

  With cloud management, the Agile Controller provides full lifecycle management covering IoT planning, deployment, and O&M. It provides plug-and-play of considerable devices and automatic service deployment, greatly shortening the service provisioning time and reducing the OPEX.

- **Open Ecosystem, Accelerating Industry Application Innovation**

  It provides various open APIs and eSDKs and standard protocols to connect to industry application systems of different partners. And also through the open platform with cloud management, the Agile Controller provides industry customers with a new business mode based on cloud services.

Applicable Scenarios

Until now, the EC-IoT Solution has been applied to the elevators connection, power IoT, city and lighting IoT, smart energy, smart manufacturing, engineering machinery, and the Internet of Vehicle (IOV). The EC-IoT Solution will become the gripping knob to enable industry digital transformation.

EC-IoT Product Family

**Agile Controller**

- Cloud managed for tens of million of terminals, easy expansion
- Open architecture, rapid integration with industrial app
- Industrial IoT module built-in, fit for different industries

**Richest Array of IoT Gateway**

- **Power IoT**
  - AR530/AR501C/AR501X

- **Industrial IoT**
  - AR502/AR509/AR505/AR2500/AR1500/AR510/AR515

- **City & Lighting IoT**
  - AR501L/AR501S/AR502

- **Vehicle IoT**
  - AR503/AR510/AR515

- **ARDCM** (HUAWEI Inside)
  - PLC-IoT, strong anti-interference, 2 Mbps (max.), 1000m (one hop), up to 15 levels of repeaters
  - Support PLC-IoT/RF/DI/DO/RS485, etc.,
  - Open for secondary development, rapid integration with industrial terminals