Renesas IoT Sandbox allows you to rapidly create IoT applications using cloud services and real-time workflows. All functions needed for development are included, from connecting to the cloud and processing device data, to IoT-centric libraries with analytics functions for predicting trends and detecting anomalies.

Renesas IoT Sandbox aggregates all event data from any source, whether it's sensors, mobile apps, or an existing cloud, and performs real-time processing to extract intelligence or implement automation. With Renesas IoT Sandbox, you can focus on the application’s logic while the Sandbox quickly extracts intelligent insights to power your applications.

- No cost or installation developer areas for data monitoring and data intelligence
- Cloud connectivity between Renesas processors, mobile devices, desktop, and third-party cloud services
- Wide choice of third-party cloud services

www.renesas.com/iotsandbox
Renesas IoT Sandbox Developer Areas

<table>
<thead>
<tr>
<th>Description</th>
<th>Data Monitoring</th>
<th>Data Intelligence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great for visual data monitoring using dashboards and population control by batch updates</td>
<td>Use near real-time data to make intelligent personalized actions based on 100% programmatic Python workflows</td>
<td></td>
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</tbody>
</table>

| Application examples | Gym Management, Fleet Management, Weather Station, and Smart Gardening | Fitness Monitors, Smart Power Tools, Building Access, and Smart Appliances |
| Time frame | Prototyping in minutes | Prototyping in hours |
| Cloud type | Open cloud connection | Secured cloud connection |

Renesas IoT Sandbox Compatible Kits

Renesas offers a wide choice of kits and will continue to create more kits that are supported by Renesas IoT Sandbox and loaded with tutorials. Listed below are kits currently available for your immediate IoT prototyping experience.

- **Synergy SSD9**
  - IoT Fast Prototyping Kit

- **Synergy S3A7**
  - IoT Fast Prototyping Kit

- **Synergy SK-S7G2**
  - Starter Kit

- **RX231 Wi-Fi Cloud Connectivity Kit**

Renesas IoT Sandbox Network Topology

End-to-end network topology showing how components are connected.

Renesas IoT Sandbox Compatible Kits

Renesas IoT Sandbox Kits

- **MCU/MPU**
  - MQTT, HTTP
- **Wi-Fi Ethernet**
  - MQTT, HTTP

Renesas IoT Sandbox Terminals

- **IoT Sandbox Mobile Apps**
  - REST
- **IoT Sandbox Cloud IDE**
  - REST
- **Renesas IoT Sandbox**
  - REST, HTTP
- **Third-party Cloud Services**
  - REST, HTTP

*Sub-1GHz and Cellular will be available later

Developer Community Resources

Build your IoT development skills by using such resources as the IoT Community. The IoT Community provides tutorials, including step-by-step guidance using the Renesas Synergy™ SK-S7G2 and S3A7 kits, live training sessions, community discussion, and other testing and learning activities.

**iotcommunity.io**