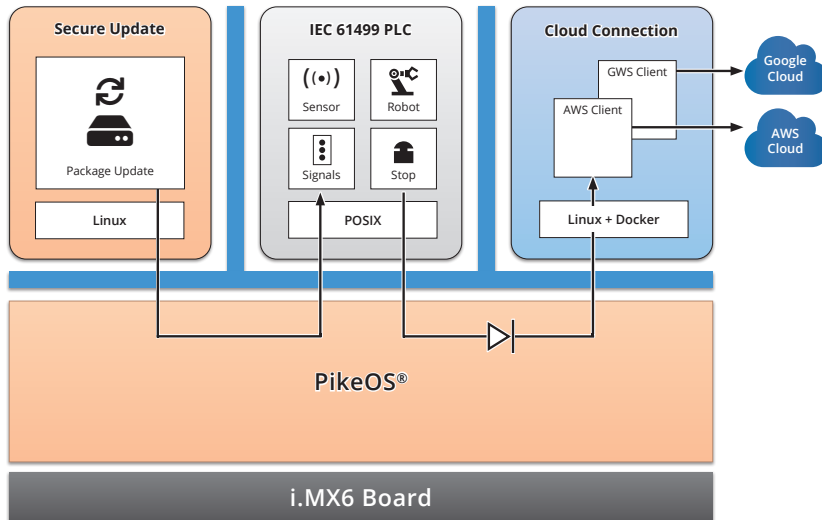




# Secure Cloud Edge Device

## Safety & Security by Design



Three solutions combining an IEC 61499-compliant PLC with cloud connectivity for common Security concerns in edge devices.

### Partners



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### 1. Data Diode

Process information from the PLC needs to flow towards the cloud for aggregation, but attackers must not be able to compromise the device via its uplink. PikeOS solves this via a mechanism that lets data travel only in one direction. Even if the virtual machine that contains the cloud connector is compromised, attackers will be unable to gain control over the PLC.

### 2. Secure Update

Device manufacturers want to remotely install updates for units that are deployed on the customer's premises. The update process must be protected against external influence: Firmware images or other data need to be integrity-checked before deployment. Using public-key encryption in a separate Secure Update partition, PikeOS downloads and installs updates for the PLC running on the same device.

### 3. Flexible Cloud Connectivity

Innovation cycles in the IT world are very short, and Big Data cloud providers come and go. In scenarios where flexibility is the top priority, Docker technology helps to deploy complex applications. By means of that, connectors for Amazon AWS and Google Cloud can be easily swapped out in a matter of seconds.

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