Industrial IoT Automation

With Coral intelligence

Main Features

- Ready-to-use IoT Gateway to accelerate IoT project deployment
- Easy connectivity via IoT studio, drag-and-drop managing data flow
- Connect up to 5 devices via Modbus TCP/RTU protocol for data acquisition
- Enabled with Coral Intelligence
- Support wired or wireless cloud connectivity via publish-subscribe-based MQTT protocol
- Open architecture supports both Windows-based and Ubuntu-based IoT Gateway

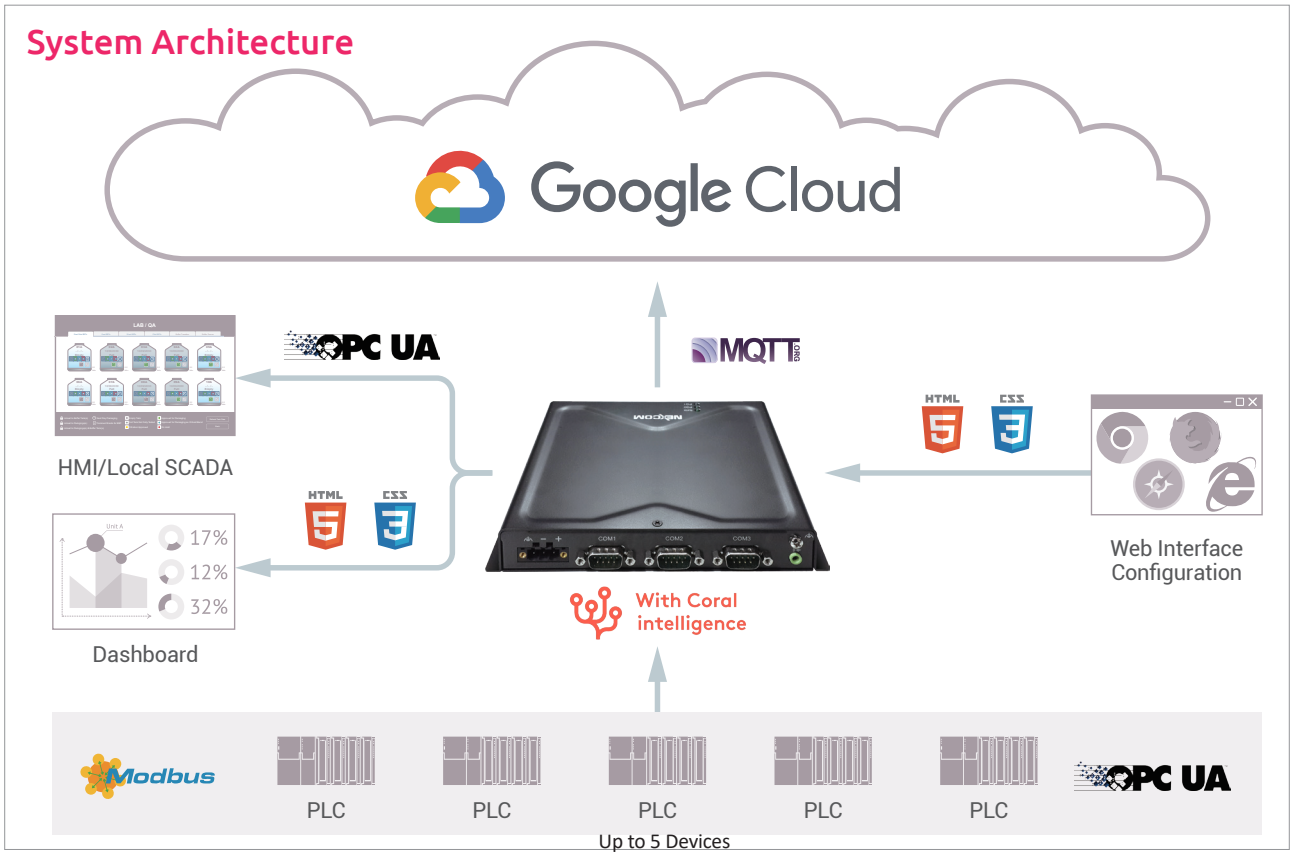
Product Overview

NEXCOM Industrial IoT Automation series is designed to acquire data from PLC or device in the field side, and upload or push it to Google Cloud Services. The Google Cloud IoT ready IIoT Gateways with Coral Intelligence could also take simple logic control without another computer. With these acquired data, they could help users improve their process parameter or to predict the machine's maintenance schedule to reduce the machine's down time. The Google Cloud IoT ready controller with Coral Intelligence is designed for open real-time industrial applications and offers comprehensive and easy-to-use application configurator for system development and debugging to speed up development time.

Hardware Specifications

Model	NISE50-GCIoT	NIFE105	NISE3800E-GCIoT
CPU	Intel Atom E3826 1.46GHz	Intel Atom x5-E3930 1.8GHz	Intel Core i3-6100TE
Chipset			Q170 PCH
Memory	2G DDR3L Onboard	4GB DDR3L Onboard	8GB DDR4
Storge	16GB eMMC, 32GB mSATA	16GB eMMC, 32GB mSATA	128G TLC SSD
Display	HDMI	HDMI	1 (DVI-D), DP, HDMI
I/O	4x USB 2.0 2x RS232 1x RS422/485 Mic-in & Line-out	4x USB3.0 4 x RS232 2x RS422/RS485 2x RS422/RS485 2KV Isolation 4x GPIO	4x USB3.0 2x USB2.0 2x RS232/RS422/485 Mic-in & Line-out
miniPCIe	Coral Embedded	Coral Embedded	Coral Embedded
SIM Card Holder	1	1	1
LAN Ports	2x GbE	2x GbE	3x GbE
Power Input Range	ATX, DC +24V	ATX, DC +24V	ATX, DC +9 ~ 30V
Operating System	Linux Ubuntu	Linux Ubuntu	Linux Yocto
System Dimension (WxDxH)	233 x 227 x 169 mm	56.5 x 100 x 1200 mm	215 x 272 x 93 mm
Certification	CE, FCC, UL, cUL	CE, FCC	CE, FCC, UL, cUL

System Architecture



Gateway Feature

Communication Protocols

- Modbus TCP/RTU
  - Most common communication protocol
  - Connect up to 5 devices max
- OPC UA Client/Server
  - OPC UA Client for getting data from the device
- MQTT
  - A lightweight messaging protocol
  - Push data or message to the cloud or database

Web Configuration

- IoT Studio
  - Rapid prototyping/engineering tool
  - With IoT-Studio, user can easy to configure
- Remote Access
  - Access and management anywhere via browser
  - Supports popular browser based on HTML5 & CSS3

Cloud Connectivity Available

- Google Cloud IoT Core and Cloud IoT Edge
  - Service of reliable and secure bidirectional communication between IoT devices and cloud
- Coral From Google Edge TPU processor for AI applications

Dashboard UI/HMI Support

- Dashboard
  - Quickly create a dynamic data dashboard
  - Provides variety of widgets for user to directly use via simple configuration
- Connect to HMI
  - Built in OPC UA Server function, which provides data access for SCADA, HMI or controller used