

Main Features

- Ready-to-use IoT Gateway to accelerate IoT project deployment
- Easy connectivity via IoT studio, drag-and-drop managing data flow
- Connecting Max. 5 devices via Modbus TCP/RTU protocol for data acquisition
- Support wired or wireless cloud connectivity via publish-subscribe-based MQTT protocol
- Open architecture support both Windows-based and Ubuntu-based IoT Gateway

Product Overview

NISE 50-IoT series is designed to acquire data from PLCs or devices in the field, and upload or push it to Google Cloud. The NISE 50 GCIoT Ready IoT Gateway can also perform simple logic control with its own compute resources. With this acquired data, it can help users improve their process parameters or predict the machine's maintenance schedule to reduce down time. IoT-Studio, which is a built-in application, speeds up the development and reduces time to deployment.

Hardware Specification

Communication Protocols

- Modbus TCP
- Modbus RTU
- MQTT
- OPC UA client
- OPC UA server (NISE 50-GCP-UB support)

System Configuration

- Intel Atom® E3826, 1.46GHz
- On-board 2GB DDR3L 1066/1333 RAM
- 16G mSATA SSD installed
- 3 x mini-PCIe socket for optional Wi-Fi/3.5G modules

System I/O Interface

- ATX power on/off switch
- 1 x Storage, 2 x GPIO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports
- 1 x HDMI display output
- 4 x USB 2.0
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 3 x COM for DB9 connector

Power and Dimension

- Power input: 24V DC +/-20%
- Dimensions: 162mm(W) x 26mm(H) x 150mm(D) without wall-mount bracket

Software Package

- Windows 10 IoT Enterprise 2016 LTSB Entry 64-bit
- Ubuntu 14.04.5 64-bit
- IoT Studio with dashboard
- OPC UA Server (NISE 50-GCP-UB only)

Certification

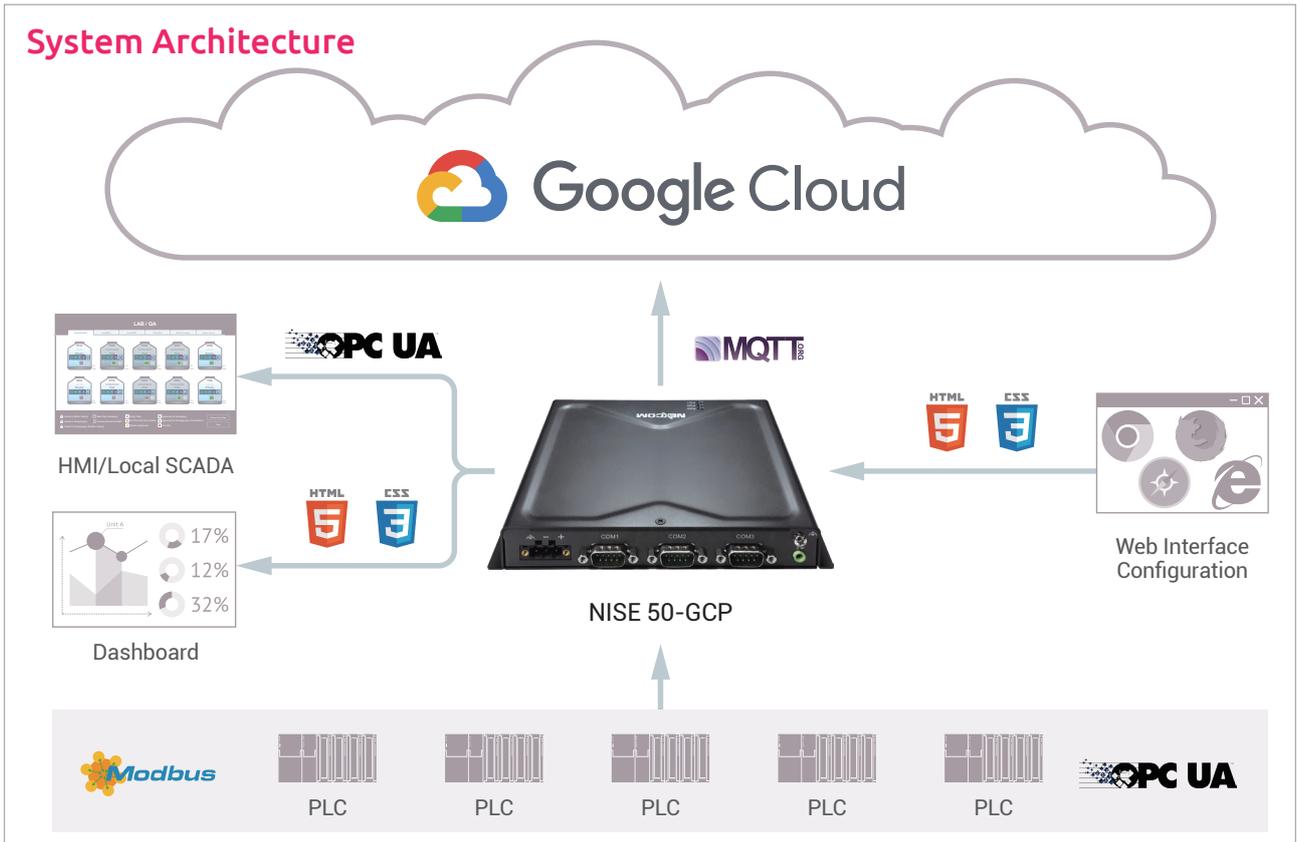
- CE
- FCC Class A
- UL/cUL

Ordering Information

- **NISE 50-GCIoT (P/N: 10J00005038X0)**
Google Cloud IoT Ready i4.0 IoT Gateway

Optional

- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**



Gateway Feature



Communication Protocols

- Modbus TCP/RTU
 - Most common communication protocol
 - Connect up to 5 devices max
- OPC UA Server/Client
 - OPC UA Client for getting data from the device
 - OPC UA Server for access and display data to HMI (NISE 50-GCP-UB only)
- 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 the NISE50-GCP setting
- Remote Access
 - Access and management NISE50-GCP anywhere via browser
 - Support popular browser based on HTML5 & CSS3



Cloud Connectivity Available

- Google Cloud IoT Core and Cloud IoT Edge
 - Service of reliable and secure bidirectional communications between IoT devices and cloud



Dashboard UI/HMI Support

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

