

Smart Farming Solution Pack

All-in-One Pack built-in
NIFE Automation Controller



IIoT Studio



SoftPLC



I/O Sensors

Main Features

- ♦ Independent demo box: all-in-one design
- ♦ Modbus protocol communication
- ♦ Easy demonstration for smart farming
- ♦ Cloud data display w/IIoT studio and dashboard
- ♦ Compatible IEC61131-3 for Softlogic programming

Solution Pack Overview

Trolley F6 smart farming solution pack is a training/demo kit for smart farming. It demonstrates how to utilize display, PC-based controller, Modbus TCP I/O device, and IIoT Studio dashboard to process data from OT level to IT level. This is an excellent solution pack which users can understand the basic I4.0 architecture, practice essential scenarios of smart farming, and gains comprehensive OT/IT knowledge for building a cloud-based project.

Solution Pack Spot Lights



Increase Farming Productivity

- ♦ Cloud based monitoring
- ♦ Optimize farming productivity and efficiency
- ♦ Self-control environment factors (ex.)
- ♦ Temperature, humidity and CO₂
- ♦ Self-control fan for ventilation costs



From Field Data to Cloud

- ♦ SoftLogic P10 performance for I/O access
- ♦ IIoT Studio for easy drag & drop development



Modbus TCP/RTU I/O Support

- ♦ Compliant with world's most common I/O device
- ♦ FAN control, fire alarm, water spreader
- ♦ On site monitoring (temperature, humidity, etc.)



Strong Controller Protection

- ♦ EMC heavy industry standard
- ♦ IEC61131-2 voltage drop test verified

Solution Pack Configuration

NIFE103/NIFE105 - P10 Performance SoftPLC Controller

- ♦ Support multi-core, multi-tasking powered by Intel® Atom® dual core processor
- ♦ Compliant with industrial IEC61131-3 programming languages (LD/ FBD/SFC/IL/ST/CFC)
- ♦ Support up to 1.0ms cycle time and 512 I/O points
- ♦ Support PLC handler APIs and OPC-UA server for communication
- ♦ Support industrial Ethernet Fieldbus protocols (EtherCAT, EtherNet/IP, PROFINET)
- ♦ Support industrial GbE LAN, COM, and USB ports

eLite610 10" HMI w/ IIoT Studio

- ♦ Cost efficient 10" inch display with JMobile software built-in
- ♦ Support IIoT Studio dashboard

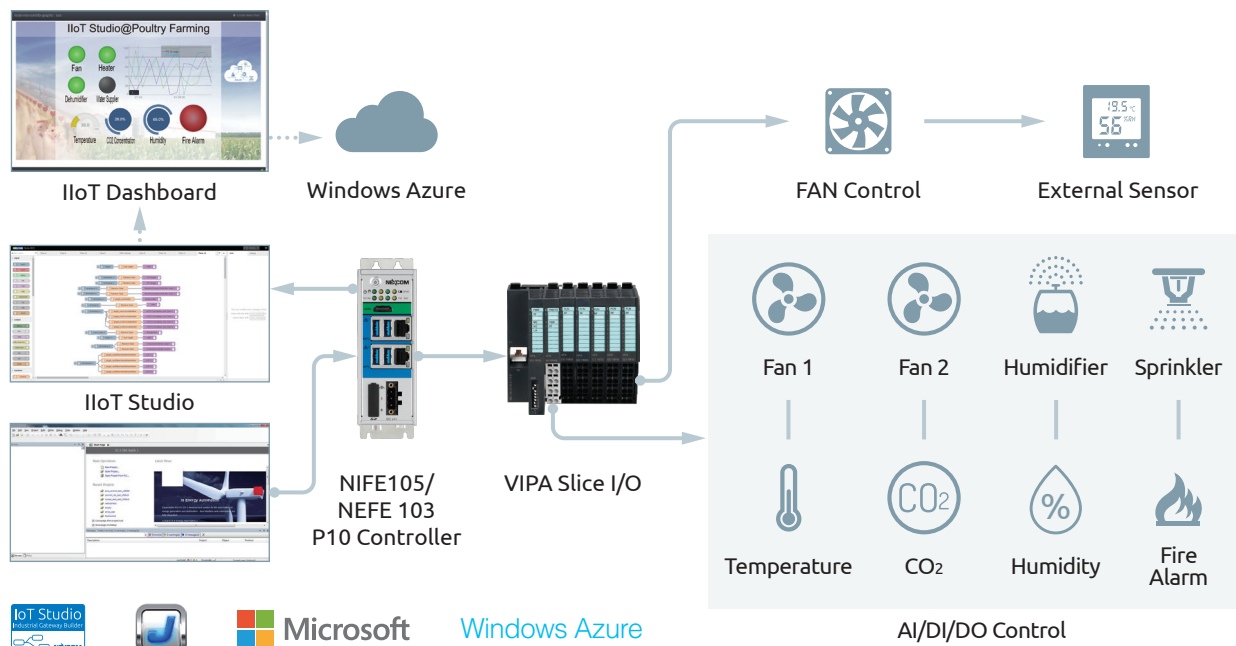
VIPA Modbus TCP Device I/O

- ♦ Connecting with DI/DO/AI/FAN peripheral devices
- ♦ Scenarios for farming simulation with 4 indicators, 1 switch, 1 fan, and 3 knobs

IIoT Studio V1.2 – Web Configuration Tool for Cloud Application

- ♦ User friendly and Web-based configuration tool by click and drop actions
- ♦ Manage cyber physical system efficiently by NEXCOM hardware information nodes
- ♦ Connect to cloud securely with verified MQTT and AMQP nodes
- ♦ Support SQLite for database application and https for web service
- ♦ Support fieldbus (PROFINET, PROFIBUS, Ethernet/IP) configuration
- ♦ Support Modbus/RTU and Modbus/TCP master, OPC-UA client for field devices/controller data concentration

Solution Pack Block Diagram



Ordering Information

- ♦ **Trolley F6 Smart Farming Solution Pack**
Please contact IAS sales: sales@nexcom.com.tw
All-in-One Pack built-in NIFE Automation Controller, Modbus TCP I/O,
JMobile HMI and IIoT Studio easily connecting to Cloud