

Efficient real-time data processing with PLCs in power automation
2008-04-24

Location / Country : China

Product Solutions:

[UC-7410, UC-7420](#)

RISC-based ready-to-run computer with 8 serial ports, dual LANs, USB, PCMCIA,
CompactFlash

Introduction

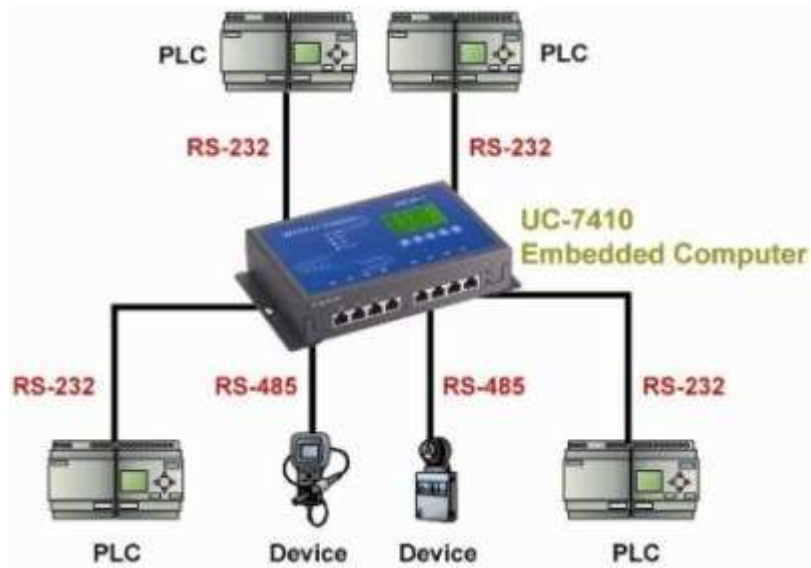
Project Introduction

PLCs are a common solution in many industrial fields. Their programmable operation and ability to connect many devices are particularly useful in establishing industrial automation systems. However, there are several disadvantages that are often encountered when using traditional PLC solutions:

1. It is not always possible to obtain real-time data from attached devices.
2. Programming of PLCs is complicated and can require significant time, manpower, and expense.
3. Protocol converters may be required to attach devices that do not support RS-485 transmission.

Moxa Solution

Since Moxa's UC-7410 embedded computer addresses each of these disadvantages, it has been used to replace PLCs in a power substation in China. The UC-7410's programmable platform allows it to be used as a helpful protocol converter for effortless communication between different devices. Real-time data collection is achieved by connecting each device directly to the UC-7410. RS-232/422/485 operation is selected by software, making additional interface conversion unnecessary. The UC-7410's powerful combination of features makes it an ideal solution for PLC-related applications.



Why Moxa

- Active queries to attached devices can be used for real-time data collection and processing.
- Devices can be immediately connected without using an interface converter, due to serial ports with software-selectable RS-232/422/485 operation.
- The embedded Helios software can be used to establish a centralized management architecture.