

Embedded computers used for unmanned substation automation

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RISC-based 19-inch rackmount data acquisition computer with 16 serial ports, quad LANs, PCMCIA, CompactFlash, USB

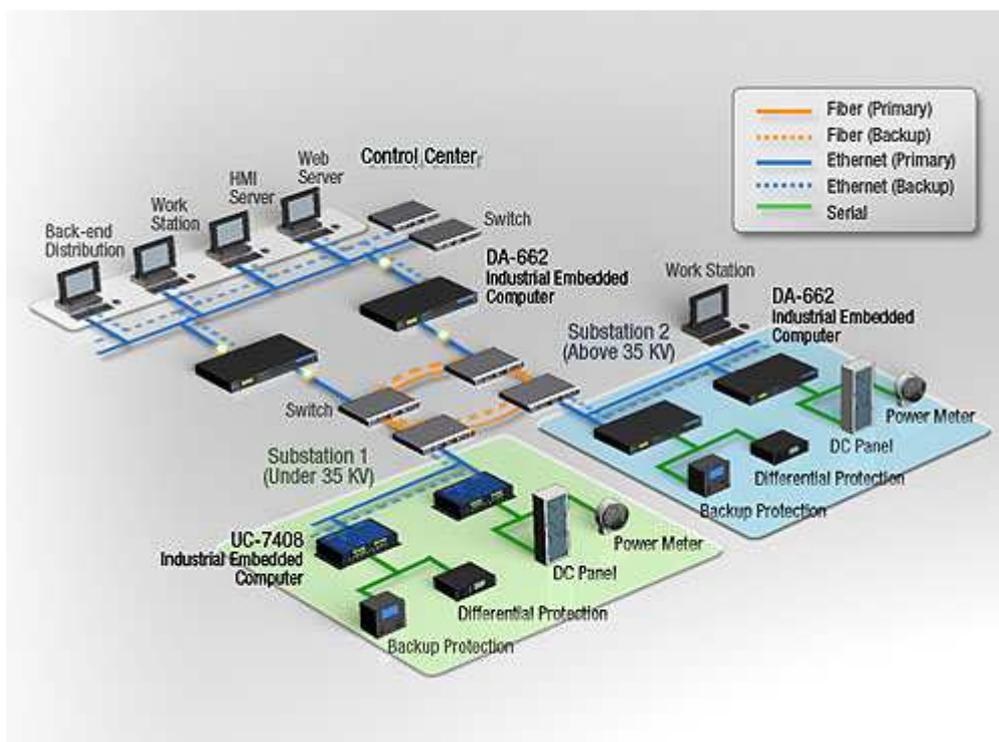
Introduction

Project Introduction

Power substations require many types of devices to construct a system that generates and distributes power. Traditionally, human beings were employed to monitor the performance of the devices, but this solution is costly and unreliable due to the possibility of human error. For these and other reasons, power substations have moved to unmanned, automated monitoring systems.

Moxa Solution

A company in China is using Moxa's DA-662 embedded computers in a power substation as part of a completely automated system for power distribution management. The application uses the DA-662 front-end controllers at both remote and local sites. Moxa's UC-7408 embedded computers are also used as part of this application, allowing devices such as switch gears to be controlled. In addition, data can be transmitted safely back to the control center for power distribution, and the DA-662 can analyze data collected from remote devices to deliver highly reliable and powerful computing, and ensure the high performance expected of multifunctional controller usage.



Why Moxa

- Scalability ensures system flexibility; expand from systems with a single-computer to multiple-computer systems to provide efficient performance and hardware redundancy.
- Flexible systems provide multi-level open data interfaces and stability for easy integration with third-party devices.
- A multi-level management architecture makes it easier for individual controllers to be dedicated to a particular task.
- The 4 LAN ports provide a perfect solution for network and transmission redundancy.
- The 19-inch and 1U designs make installation quick and easy.
- The wide range of power input voltages, from 100 to 240 VAC/VDC, makes it easy to integrate the DA-662 with existing systems.
- The comprehensive access and firewall design helps avoid network invasions, virus attacks, and human error.
- The standard IEC6870-5-104 protocol interface promises speeds up to 100 Mbps.
- Easy configuration, straightforward installation, and portability provide end-users with an economical solution.