

Serial Converters / Device Servers



Serial Converter and Device Server Tutorial

■ What is a Serial Converter?

A serial converter, sometimes referred to as a protocol converter, converts different serial protocols such as RS-232 and RS-485.

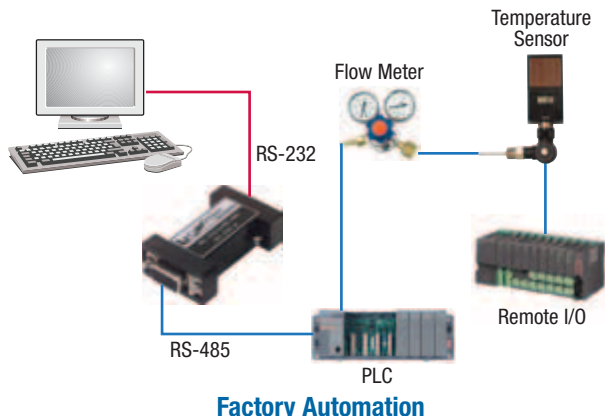
■ How is a Serial Converter used?

Most serial converters have two ports or terminal blocks where copper wire, UTP or multi conductor data cable, are attached either by screwing in (terminal block) plugging in (RJ11, RJ45) or screwing in (DB9, DB25) the connector or leads. One end interfaces with a RS-232 network and the other with a RS-422 network for example.

■ Where are Serial Converters used?

Serial converters are used in many applications and environments including Point of Sale (POS), factory automation, processing plants (food, petroleum) and warehouse and shipping operations.

Typical Serial Converter Applications



■ What is a Device Server?

A Device Server, sometimes referred to as an Ethernet Serial Server, is used to connect a serial network such as RS-232 to an Ethernet device or Network that uses the IP (Internet Protocol) protocol.

is required to set up the communication between the two networks via a management application built into the Device Server.

■ Where are Device Servers used?

Like Serial Converters, Device Servers are used in many industrial applications where legacy serial networks are installed. Many newer devices such as pumps, flow meters, scales and even industrial robots found on automobile manufacturing lines are being designed and built with Ethernet interfaces.

Ethernet is very scalable and it provides world wide access and control when used with a router. Additionally many industrial operations are now building integrated networks where Ethernet IP is used at the factory/process level all the way through the administrative business network. In the past the two networks were separate as the plant used Modbus, Profibus and other serial based networks that did not communicate with the corporate Ethernet networks.

■ How is a Device Server used?

A Device Server has one or more serial ports and typically one RJ45 Ethernet port. Cables are connected to each port into the Serial and Ethernet network. Typically some set up

Typical Device Server Application

