

Isolated Serial Converter for Waste Water Reliability



Industry: Water & Waste Water Treatment
Product: Optically Isolated RS-232 to 485 Converter

• The Challenge

The wastewater treatment plant had a big problem. Rogue currents and ground loops were playing havoc with the RS-485 network used to control and monitor the plant. Intermittent data errors prevented the control system from reliably communicating with remote sensors. Not only was this dangerous and messy, but EPA fines and overtime costs spent on troubleshooting were busting the budget.

• The Solution

The control network required complete isolation from the rest of the system. Each communication port had to be isolated from each other and the power input to prevent current and ground loops from causing the data errors. Using the triple isolated Ilinx™ converter each possible source of unwanted stray currents was eliminated to protect the integrity of the data signals, improving the reliability of the entire control system. The results were improved productivity, reduced downtime, overtime, and elimination or reduction of EPA fines.



• Why B&B Electronics?

- Three way isolation provides the most robust protection from ground loops and stray currents that's available and a great fit for the challenges of a water treatment plant.
- The wide temperature range of the 485OPDRi stands up to the demanding water treatment environment.

• The Product

Ilinx™ Model 485OPDRi – Optically Isolated RS-232 to 485 Converter

- 2000 V, 3-way isolation on input/output/power
- Wide temperature range (-40 to 85°C)
- CE, cUL Class1 Div2



LINX™
Model 485OPDRi

