• **The Challenge**
When technician John Baker of Premier Resource Services connected his laptop to a customer’s piece of industrial machinery he got a nasty surprise. There was a quick puff of smoke, and John lost his hard drive, his USB port and the USB adapter that he’d connected to the machine.

The problem, he soon discovered, was that while his laptop was plugged into the wall, the machine he was servicing was connected to the shop’s single-phase power supply and its leads had been reversed to keep it from tripping a GFI switch. As the laptop and the connected device now had different ground potentials, the USB cable became the path to a lower ground state. It was an expensive lesson.

• **The Solution**
Baker contacted B&B Electronics to find out how to keep this from happening again. We told him that because field technicians use their laptops in a wide variety of settings, power quality will always be inconsistent and a simple power line filter won’t necessarily catch the problems. So Baker acquired one of our UH401 compact USB-to-USB isolators and his laptop has been protected ever since.

• **Why B&B Electronics?**
Our products are designed, engineered and manufactured for industrial applications. Standard USB connectors available for the consumer market are not tough enough to handle the challenges field service technicians face every day. We understand how to connect you in the industrial world. Built at our ISO 9000 certified facility in Illinois, these USB Isolators are in-stock and ready for immediate delivery.
Protect Equipment with USB Isolators

Industry: Manufacturing & Automation
Product: UH401 and UH401-2KV USB Isolators

• The Product
  Models UH401 and UH401-2KV – USB Isolators
  • Ultra compact size - just 2.0 x 1.7 x 0.8 inches - these small isolators pack a powerful punch against electrical noises, surges, and spikes.
  • Isolation barrier eliminates disruptive ground loops.
  • High retention USB connectors are 50% stronger than conventional USB ports – won’t pull loose easily
  • Model UH401 meets EN60601-1-1 and EN60601-1-2 specifications for medical applications
  • Wide temperature range: -40 to 80°C
  • USB bus powered. No need for external power.

Model UH401

Laptop

Model UH401

PLC