

Extending the Life of Legacy Medical Equipment



Industry: Medical

Product: Custom Interface Adapter

• The Challenge

About a hundred specialized 2” strip printers were threatened with obsolescence when Marquette Medical Systems, Milwaukee, Wisconsin, updated a patient monitoring system for a major hospital to a PC-based system.

The facility hoped to be able to continue to use the specialized printers, which provided a permanent record of patient conditions, but the legacy printers used an RS-422 data signal and unusual connector pin-out. They would not communicate with RS-232 based PCs.

• The Solution

Rather than replace all the printers, Tom Gilbert, an engineer at Marquette Medical Systems, contacted B&B Electronics to see if we could provide an interface adapter to accommodate the unusual combination. A customized version of B&B Electronics Model 422LP9R, a 9-pin RS-232 to RS-422 converter, was designed and produced for the application. The adapters were delivered in a timely manner and cost just a fraction of the price of new printers.

• Why B&B Electronics?

Custom design or product modification is easy for B&B Electronics. Our design engineers and our manufacturing facility based at our headquarters in Illinois. Rapid project turnaround means custom products can be delivered in a very timely manner. For Marquette Medical Systems, the adapters cost just a fraction of the price of new printers – keeping costs down and retaining legacy equipment investments.

• The Product

Custom RS-232 to RS-422 Converter

- Port-powered from DTR and RTS lines on RS-232 side
- Converts RS-232 lines to RS-422 for longer distances and multi-drop capability
- DB-9 female connectors on RS-232 and RS-422 sides
- RS-422 driver enabled when RTS is asserted
- RS-422 receiver always enabled

