

Connecting Solutions with Medical Devices

Steve Sheehan

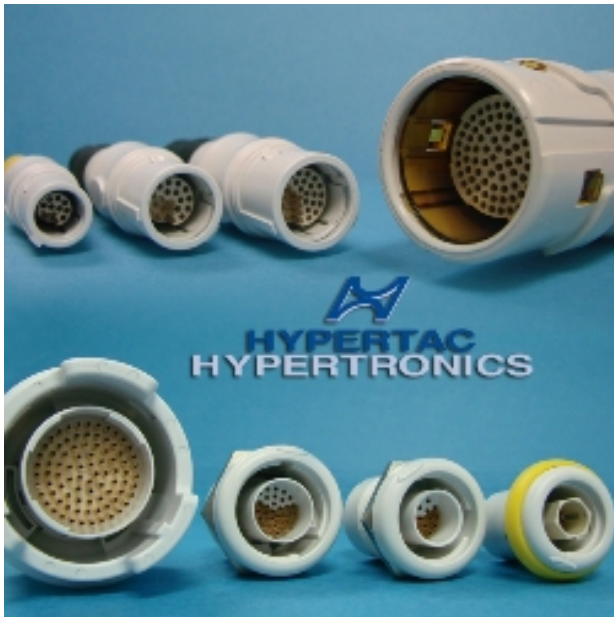
As the rising cost of healthcare in the U.S. continues to cartwheel out of control, the medical community is demanding a much healthier ROI from the technology solutions that it deploys across multiple disciplines. The interconnect solutions arena is a case in point, as higher performance and greater dependability have become the industry's catch words.

The medical design community continues hurtling down a path that sees it requiring medical devices that are more feature rich, are available in a smaller format, have the power to transmit increasing amounts of critical data, carry a higher degree of protective shielding, and are totally dependable and durable. These smaller yet more powerful devices are playing a greater role in keeping people healthy, while also making some modest progress in the effort to contain steadily rising costs across the industry.

The number of hospitals in the U.S. has been decreasing for more than 20 years and the shrinking availability of hospital beds has resulted in moving patients (in increasing numbers) from the hospital to their homes for treatment. This reality has been a prime catalyst in the development and deployment of smaller sophisticated medical device technology, for remote use, that takes medical care from the hospital into the home environment. Such technological innovation is now making it possible for patients to take a far larger role in monitoring and managing their health from the comfort and security of their own homes.

While this increasing shift of venue from the hospital to the home has served to make life a great deal more convenient and less stressful for patients, it also levies new and greater demands on medical device technology. This is true across a broad sweep of the medical landscape, which includes ambulatory cardiac monitoring and pain-management. This shifting venue has changed the recipe in the technological mix and laid-down a daunting challenge to interconnect solutions providers to serve-up the customized connectors that are needed to meet these challenges. More than ever before, medical customers are seeking connectors that can operate efficiently in challenging environments and that also offer enhanced performance at a cost-effective price.

In real-world settings outside of the hospital environment, for people taking a greater role in maintaining their health in areas such as patient monitoring and pain management, or for diabetics who must constantly test their blood sugar levels, the trend is clearly one of miniaturization and enhanced device dependability.



Hypertronics medical connectors offer sealing and color-coding, can be keyed, and are available in a variety of standard and customized versions.

A critical component in today's smaller and more sophisticated medical device technology is the interconnect solutions that device manufacturers are employing. Medical device manufacturers are reaching out to connector companies across the industry to work more closely with them in designing interconnect solutions that can be relied upon to work each and every time. These solutions are often required to ensure high mating cycles, low contact resistance, enhanced signal integrity, and better protection from damaging EMI and RFI interference. A tall order to be sure, however, connector companies are rising to meet the challenge, and keeping pace with the new technological demands of the medical device industry. They are responding with a broad range of interconnect offerings that are innovative, and embody designed-in features and functionality that ensure total dependability while delivering real value to medical professionals.

In today's world, patients are increasingly looking to the medical community for the best care possible, for peace of mind, and for a greater sense of independence through new home healthcare initiatives. Most importantly, people are looking for a better quality of life, and new technologies are playing a paramount role in improving the quality of healthcare. In the final analysis, connectors are small components that can make a very big difference when it matters most.

Steve Sheehan is director of medical business development at Hypertronics Corp [1]. He is responsible for strategic marketing, new product development, and new business development related to Hypertronics' medical market. Sheehan can be reached at 978-568-2768 or steve.sheehan@hypertronics.com [2].

Connecting Solutions with Medical Devices

Published on Medical Design Technology (<http://www.mdtmag.com>)

Source URL (retrieved on 02/01/2015 - 3:12pm):

<http://www.mdtmag.com/articles/2012/01/connecting-solutions-medical-devices>

Links:

[1] <http://www.hypertronics.com/>

[2] <mailto:steve.sheehan@hypertronics.com>