Medical: Application Case Study

Application: ***Automatic External Defibrillators (AEDs)***

The leader in AEDs required a rugged, simple to use, connector with both power and signal contacts to charge their device and download patient information while being transported in an ambulance. Their systems are well known with first responders for being extremely reliable and immune to damage during heavy use in the field. Smiths Interconnect known for high quality connector solutions was the supplier of choice as the connectors needed to perform under rugged operating conditions while being effortless to mate, in stressful situations, in adverse weather, and often low light environments. The Smiths' product team engaged with the customer design team and developed a reliable, rugged solution that met all their requirements.

Solution: ***D02 Series***

Smiths Interconnect's push-button D02 series was perfect for their application, since it can be blind mated by hand and latched by simply rotating the connector until it inserts and locks … great for times when the medical personnel are more focused on their patients than with how a connector works. Since 2 power and 5 signal contacts were required, the design team recommended utilizing the 8A 1.5mm and 2.5A 0.5mm Hypertac® contacts in a new set of D02 insulators. Also, because the cables were often dropped or pulled during rugged use, Smiths designed a metal plug body which would withstand this abuse, and when painted, matched the look of the plastic D02 components.

Customer Advantage:

- *Rugged:* Hypertac® contacts withstand shock & vibration during rough use, and a custom metal plug body stands up to drops and pulls
- *Hybrid:* Custom 2 power + 5 signal design provides customer with one interconnect system in place of multiple connectors thereby reducing the number of cables in the field
- *Easy to Use:* Simple push-button design is ergonomic and simple without additional user training
- *Low Force:* Easy and quick to mate and unmate in stressful situations