

ZOLL Medical Meets Product Launch Deadline for State of the Art Defibrillator with L-com's Custom Cable Solution



Customer Profile

Customer: ZOLL Medical
Location: Chelmsford, MA
Industry: Medical Device Mfg.

Challenge

- Develop a customized USB cable assembly for a confined space connectivity application
- Design a robust solution suitable for extreme field environments often encountered by ZOLL's customers
- Meet safety as well as material requirements

Solution

- Custom male to female USB extension cable assembly with right angle connector and custom connector over mold

Results

- Enabled timely product release and satisfied design requirements where no off the shelf solution was available

Challenge

ZOLL Medical Corporation develops and markets medical devices and software solutions that help advance emergency care and save lives, while increasing clinical and operational efficiencies. With products for defibrillation and monitoring, circulation and CPR feedback, data management, fluid resuscitation, and therapeutic temperature management, ZOLL provides a comprehensive set of technologies that help clinicians, paramedics, police, fire professionals and lay rescuers treat victims in need of resuscitation and critical care.

During the development of one of their latest defibrillator products, ZOLL engineers encountered an issue where a standard off-the-shelf USB extension cable was not fitting into the device properly and the exposed connector shell was posing a safety hazard. The entry point into the defibrillator was very confined and the straight USB connector would not fit. Additionally the connector over mold on the female end of the USB cable did not completely cover the metal connector shell which could lead to operator shock. ZOLL engineers could not find a readily available off-the-shelf solution for their connectivity dilemma until they contacted L-com.

Solution

After consulting with the ZOLL engineering team and reviewing ZOLL's end user requirements for a robust defibrillator built for harsh field use, L-com was able to develop a customized male to female right angle USB extension cable. The cable features a right angle connector to address the confined space mating requirement as well as a custom connector over mold to prevent potential operator shock. Additionally L-com was able to meet ZOLL's material hardness requirements as well as the required pull and flex tests.

Results

By utilizing L-com's custom USB cable solution, ZOLL was able to meet their product launch commitments as well as offer a rugged, fully functional, intrinsically safe defibrillator solution for saving lives around the world.