



EMI-Shielding for Defense Contractor Display Cables

PROBLEM:

A Department of Defense (DoD) contractor needed to protect their vehicles' display cables (HDMI) from external electromagnetic interference, both from their own related vehicle systems and from opposing entities.

REQUIREMENTS:

The EMI-shield needed to be flexible, wrap-around, and easy to install on the HDMI cables that were already in place. The solution also required ground braids that extended past the end of the sleeve to allow the technician to connect the shield to the ground of the vehicle system. Once installed the shield would not need to move or bend.



SOLUTION:

Custom Z-Shield® (AL) EMI Shielding Wrap

Z-Shield (AL) is a flexible, wrap-around, high performance EMI shield that is easy to install. The Foil shielding in this product provides the highest attenuation levels of Zippertubing's shielding options. Z-Shield products are installed as a wrap-around sleeving to systems already in place, providing exceptional primary shielding, or in this case, a secondary shielding layer for the customer's HDMI cables.

CONCLUSION:

The end user was able to install these wrap-around shields on their display cables and resolve their EMI issues. The attenuation performance of Z-Shield (AL) was able to meet the testing and performance requirements outlined in MIL-STD-461 for this defense customer. They have continued to utilize this solution in additional lengths and different diameter sizes for other vehicles to bring them into compliance.