



Amphe-RXS is RADSOK® Mixed with Signal in One System

BACKGROUND

Electronics are performing more functions, and therefore require more terminals and power, while the overall systems are getting smaller. This makes space within the system the ultimate premium, and the less space that a connection system requires, the more desirable it becomes. Also, since every device, motor, battery, etc. is different, customers often require some degree of customization and flexibility in their connection system designs. These systems must still be robust and cost effective in the global market place for customers to succeed.

PROBLEM

As the size of the power contacts grew and the number of signal pins increased, customers historically moved to two connectors, one for power and one for signal. Often, having two connectors still required bulky and expensive mechanical assists because the connectors could not be hand mated without lever locks or jack screws. These assists also create more assembly labor, and they are less reliable in the field when they break or require special tools. For sealed systems, having two connectors also creates additional risk because there are more leak paths where the receptacles seal to the housing.

AIPG SOLUTION

AIPG introduces the Amphe-RXS connector series which incorporates our patented RADSOK® technology used globally around the world for many years. The product features higher amperage, lower T-rise, less resistance, lower mating force and higher mating cycles. Because RADSOK® allows ~50% more amperage through the same size pin, using them in the Amphe-RXS makes it extremely compact. Next, the AHVB signal pins can be added for high vibration and low insertion force (see Data Sheet for AHVB), or standard signal pins can be used. Finally, we will work out the details of the connector requirements like shielding, hand mated locking features, sealing, crimp or PCB terminals, blind mating, etc. Using this single, compact connection system will provide a cost, labor and space savings while getting all the features and reliability required. Let us start your design today.

