

# SECURE COMMUNICATIONS

## U.S. Armed Forces

The U.S. Armed Forces includes the Army, Navy, Air Force, Marines, Coast Guard, Army National Guard, and the Air National Guard.



## Secure Data Transfer (DTD)

The U.S. Armed Forces use a device, known as a Data Transfer Device (DTD), to transfer cryptographic code from a central control station to communications equipment used on board ships, planes, tanks and other military vehicles. This code, which is updated daily, secures communications between military personnel. To protect the code in the event a DTD is intercepted, all data stored in the device is encrypted. To add another level of security a removable device (known as a Crypto Ignition Key) was implemented. The CIK had to be:

- ✓ rugged enough to withstand the harsher environments
- ✓ available long-term
- ✓ easy to implement
- ✓ capable of meeting specific MIL-SPEC requirements



## The Solution is Key (or in this case a "Plug")

A KSD-1 memory Plug from Datakey Electronics carries information required to securely use the DTD device. This Plug was custom designed to meet the stringent environmental and portability requirements of the DTD. The KSD Plug features conductive silicone contacts that seal its



memory from elements such as moisture, salt spray, mud, and explosive atmospheres. The KSD provides a secure and reliable way to carry vital information in rugged military environments. It contains a read/write memory that can be updated and reused as often as the cryptographic key changes. In addition, it is small enough to fit in compact, portable units.

## Fully-Engineered



The KSD Receptacle also is sealed for use in military environments and requires only a small amount of interface space in this hand-held unit. The KSD Receptacle provides the physical and electrical connection between the Plug and the host hardware. The KSD Receptacle is water-resistant when mounted properly and employs a wiping action that removes dirt and corrosive residue from the Token with each insertion. Detection is performed by the host detecting the grounding of one pin.

## They Chose Datakey Electronics

By choosing Datakey Electronics, the U.S. military was able to procure a product that could survive harsh environments—from the freezing cold of the Antarctic to desert sand and heat. In addition, its small size and simple interface were essential for use in this desktop unit.



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