

Products and Services – 10 Gigabit Ethernet Encryption

10 Gig Ethernet

The Datacryptor 10 Gig Ethernet (DCGE-LI) protects the confidentiality of sensitive and high-value data, voice, and video over 10 Gbps Ethernet backbones. The product is transparent to line protocols and offers customers end-to-end integration into existing 10 Gbps Layer 2 WANs. With its unique ability to support Dense Wave Division Multiplexing (DWDM) and encrypt specific channels within optical streams, the Datacryptor 10 Gig Ethernet provides not only utmost security, but also cost savings by enabling optimum bandwidth utilization.

The Datacryptor 10 Gig Ethernet is built on a Two Rack Unit (2RU)-mountable metal enclosure. Like the rest of the high-speed Datacryptor family, the unit offers dual redundant universal Alternating Current (AC) and -48 volt Direct Current (DC) power supplies and 10 Gbps Small Form Factor Pluggable (XFP) interface modules for short, intermediate, and long-range applications supporting connections up to 80 kilometers. The 10 Gig Ethernet enclosure is designed to prevent tampering by employing micro-switches that activate and erase key material if the unit is opened. With the exception of the power and management connections located in the back of the unit, the local (Host) and remote (Network) interfaces are located on the front panel for easy user access.

The Datacryptor 10 Gig Ethernet uses multiple modes of operation including Bulk (Frame) mode where the unit encrypts everything including the Ethernet Header, and Tunnel mode which encapsulates the entire frame with a new user-selectable header that can support Virtual LANs (VLANs) tags. Available interfaces and operational modes enable the platform to be tailored to match the specific needs of the customer

