



## APPLICATION: SIPRNet Tunneling

### The Challenge

SIPRNet requirements are increasing at a rapid pace across US Army facilities worldwide. For years encryption has served as the primary protection mechanism for SIPRNet networks. However, with the exponential increase in the SIPRNet access points, traditional protection methods have become extremely costly, and difficult to scale. With increasing budget pressures many DOIMs are looking for solutions that **significantly reduce the cost of SIPRNet deployments** and meet network accreditation requirements while also **increasing the bandwidth to the warfighter and long-term scalability of the network.**

### The Solution

Since 2003 the INTERCEPTOR™ Optical Network Security System has been leveraged by the intelligence community as an innovative in-line PDS solution that provides unrestrained bandwidth and significant cost savings over traditional inline, network encryptors (INE). As a physical layer device, INTERCEPTOR protects the integrity and availability of network circuits that are transporting national security information -- without any COMSEC account requirements or limitations.

Similar to SIPRNet tunneling across campus area networks with network encryptors, INTERCEPTOR can be installed on existing NIPRNet cables using spare fibers to create a protected sub-unit that can then be used to tunnel SIPRNet traffic at speeds up to 10 GB/sec and at a fraction of the cost. Once an individual sub-unit of a cable is protected by INTERCEPTOR, all of the fibers in the cable (up to 144 fibers) can be used for SIPRNet traffic - drastically reducing the cost per port per deployment.

In a recent deployment at a joint DOD command INTERCEPTOR eliminated the need for network encryptors, saving over \$1 million & increasing network bandwidth to 10 Gb/per seconds.



### PROVEN TECHNOLOGY

**INTERCEPTOR™**  
An Approved Inline PDS Solution That Has Been Leveraged In Support Of:

- Air Force INTEL
- Army INSCOM
- CENTCOM
- DHS
- DIA
- DOJ
- NRO
- The Pentagon
- SPAWAR

**NetworkIntegrity**  
SYSTEMS

We Bring Security To Light™

301 10th St. NW Suite E101, Conover, NC 28613 USA  
828.466.3491

[www.sipr-tunneling.com](http://www.sipr-tunneling.com)

# Cost-Benefit Analysis

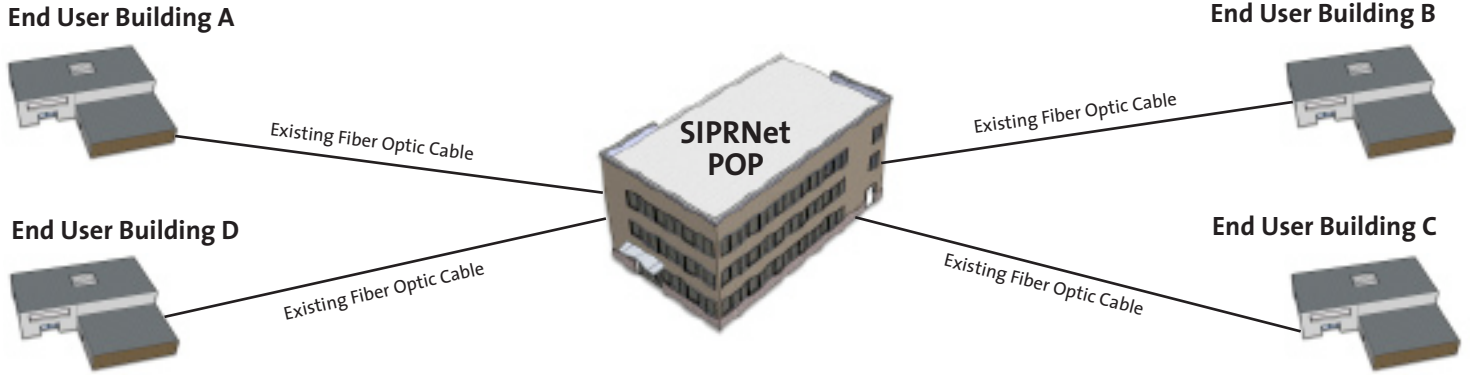
INTERCEPTOR Optical Network Security System Verses Encryption To Secure Optical Cables Used To Tunnel SIPRNET

## Scenario

Fort "Warfighter" Needs To Provide SIPRNet Connectivity To Four End User Buildings Using Existing Unprotected Fiber Optic Cables

## Challenge

Protecting The Cables While Balancing Cost, Complexity, Bandwidth And Level Of Protection.



## Possible Solutions



Versus



### Encryption

### INTERCEPTOR

#### BANDWIDTH

Typically limited to 100Mb per second or less depending on point to multipoint configuration  
Each trunk is limited to 25 Mb per second

**Unlimited**  
Each user will have full network utilization (10 Gig, 40 Gig, 100 Gig, etc.) regardless of the number of users.

#### COST

At The POP: \$9K (for a 100Mb Encryptor)  
At Each EUB: \$9K Per Fiber Pair (for a 100Mb Encryptor)  
Total cost is \$45k providing a single fiber pair to each end user building

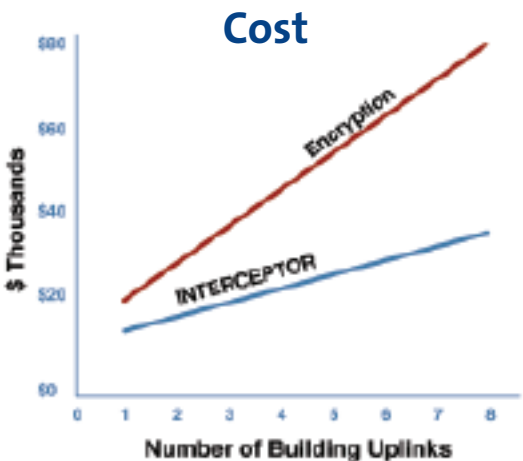
At The POP: \$18K (for a 4-Port INTERCEPTOR)  
At Each EUB: \$0  
Total cost is \$18K, regardless of number of fibers used for tunneling.

#### SPEED OF DEPLOYMENT

6-9 Months Typical  
Pending COMSEC Authorization & Product Lead Time

4-6 Weeks In Most Cases  
Commercially-Off-the-Shelf & Plug-and-Play Installation

## The Bottom Line: INTERCEPTOR Keeps Your PDS In Check



- Faster Certification
- Lower Cost
- Higher Bandwidth
- Enhanced Protection
- Easy To Install

